PROGRAMME

3-6 APRIL 2018

LIVERPOOL

European Week of Astronomy and Space Science
RAS National Astronomy Meeting

Images: Marketing Liverpool / Ant Clausen Photography and the Liverpool Telescope

WELCOME TO LIVERPOOL

We welcome colleagues from across Europe and beyond to the Arena and Convention Centre (ACC) here in Liverpool. Liverpool is a vibrant city with unique attractions, exciting events, world-class sporting offerings, and of course unrivalled musical heritage and famously warm welcomes. With the largest collection of museums and galleries in the UK anywhere outside of the capital, and its UNESCO World Heritage Waterfront, Liverpool is the ideal destination to visit and explore.

The European Week of Astronomy and Space Science (EWASS, formerly JENAM) is the annual meeting of the European Astronomical Society (EAS). The EAS together with one of its affiliated societies, organises the annual EWASS conference to enhance its links with national communities, to broaden connections between individual members and to promote European networks. Since the first meeting in Liège in 1992, EWASS has become established as the largest annual conference for European astronomy. In addition to plenary sessions and the awarding of prestigious prizes, the conference hosts many parallel symposia and special sessions, as well as numerous meetings, public, and social events.

In 2018, EWASS is being held for the first time in Liverpool, between the 3rd and 6th April. EWASS 2018 will be held jointly with the 2018 National Astronomy Meeting (NAM) of the Royal Astronomical Society (RAS). The Astrophysics Research Institute (ARI) of Liverpool John Moores University (LJMU) is responsible for both the local and scientific organising committees of the conference.

We hope that you will enjoy all that the City of Liverpool has to offer and wish you all a very productive and enjoyable congress.

We would like to thank our partners

LIVERPOOL CONVENTION BUREAU

acc Liverpool

KUONI Congress

WELCOME TO LIVERPOOL

Creating a safe, welcoming, and inclusive EWASS environment for all

In January 2018, the EAS Council adopted the EAS Ethics Statement and Guidelines for Good Practice. These will apply during EWASS and all participants are urged to read the document in full and follow its recommendations. Likewise, the RAS requests that all of its meeting attendees, including those at EWASS 2018, adhere to the Code of Conduct for RAS meetings.

The EAS considers its annual EWASS meetings to be a privileged occasion for free and frank interchange of scientific ideas, as well as for the nurturing and creation of professional and social contacts. Any abuse of power or inappropriate behaviour has no place at EWASS.

The Astronomy Allies is a diverse group of scientists committed to acting as mentors, advocates, and liaisons to counter the presence and effects of harassment in the field, and especially at conferences. At EWASS, Astronomy Allies will be available as a resource for anyone who feels they might be or have been subjected to harassment, bullying, or other unprofessional conduct – and even just to provide safe walks for anyone uncomfortable walking back to their hotel late at night. If you encounter a problem or need help, look for delegates wearing an Ally button or look for our members' contact information, which will be distributed at the meeting. You can also get in touch on Twitter (@AstronomyAllies) and by e-mail (astronomyallies@gmail.com).

If you should feel harassed or are privy to, or observe, any form of bullying or harassment during EWASS 2018 and you wish to report it, anonymously or otherwise, you can call our harassment hotline on +44 (0) 151 231 2934 or +44 (0) 7802 877 698 throughout the full duration of the meeting, 24 hours a day.

To assist parents and carers attending the EWASS 2018 Congress, childcare services are available (by pre-registration) to all delegates. By offering this in Liverpool, it is our hope that the offer of such services will become embedded in both EWASS and NAM.

http://eas.unige.ch/documents/EAS_Ethics_Statement.pdf
http://www.ras.org.uk/images/stories/meetings/Code_of_Conduct_for_RAS_Meetings.pdf

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COMMITTEES

EWASS 2018 is organised by the European Astronomical Society (EAS), in collaboration with the Royal Astronomical Society (RAS), and the Astrophysics Research Institute (ARI) of Liverpool John Moores University (LJMU).

EAS ORGANISERS

- **Roger Davies,** (University of Oxford, UK) - President
- **Johan Knapen,** (IAC, ES) - Treasurer
- **Lex Kaper,** (Univ. of Amsterdam, NL) - Councillor
- **Martine Logossou,** (Univ. of Geneva, CH) - Financial Officer
- **Marc Audard,** (Univ. of Geneva, CH) - Executive Secretary

RAS ORGANISERS

- **Robert Massey,** RAS - Deputy Executive Director
- **Annette Webb,** RAS - Office, Events and Building Manager

EWASS HOSTING COMMITTEE

- **Matt Darnley,** (ARI, LJMU, UK) - Chair
- **Stacey Habergham-Mawson,** (National Schools' Observatory (NSO), LJMU, UK) - Co-chair
- **Andy Newsam,** (ARI, LJMU, UK) - Co-chair
- **William Chantereau,** (ARI, LJMU, UK)
- **Chris Copperwheat,** Liverpool Telescope (LT), LJMU, UK
- **Hannah Dalgleish,** (ARI, LJMU, UK)
- **David Eden,** (ARI, LJMU, UK)
- **Kate Furnell,** (ARI, LJMU, UK)
- **David Hyder** (ARI, LJMU, UK)
- **Helen Jermak,** LT, LJMU, UK
- **Lee Kelvin,** (ARI, LJMU, UK)
- **Fraser Lewis,** (NSO, LJMU, UK)
- **Jonathan Marchant** (LT, LJMU, UK)
- **Ricardo Schiavon,** (ARI, LJMU, UK)

SCIENTIFIC ORGANISING COMMITTEE

- **Chris Collins,** (ARI, LJMU, UK) - Chair
- **Gabriella De Lucia,** (Osserv. Astron., INAF, Trieste) - Co-Chair
- **Roland Bacon,** (CRAL, Univ. de Lyon, France)
- **Alceste Bonanos,** (National Observatory of Athens, Greece)
- **Françoise Combes,** (Observatoire de Paris, France)
- **Matt Darnley,** (ARI, LJMU, UK)
- **Massimo Della Valle,** (INAF Naples, Italy)
- **Peter Gallagher,** (School of Physics, Trinity College Dublin, Ireland)
- **Martin Hendry,** (University of Glasgow, UK)
- **Phil James,** (ARI, LJMU, UK)
- **Darko Jevremovic,** (Astron. Obs. Belgrade, Serbia)
- **Lex Kaper,** (Univ. of Amsterdam, Netherlands / EAS)
- **Johan Knapen,** (IAC, Tenerife, Spain / EAS)
- **Mark McCaughrean,** (ESA)
- **Raffaella Morganti,** (ASTRON & Univ. of Groningen, Netherlands)
- **Hiranya Peiris,** (Oskar Klein Centre, Stockholm, Sweden & UCL London, UK)
- **Heike Rauer,** (DLR Berlin, Germany)
- **Marina Rejkuba,** (ESO)
- **Joop Schaye,** (Leiden Observatory, Netherlands)
- **John Zarnecki**, (Open University, UK / RAS President)

CONGRESS VENUE

EWASS 2018 will be held at the Arena and Convention Centre (ACC) Liverpool.

Kings Dock, Liverpool Waterfront
Liverpool, L3 4FP
United Kingdom
+44 (0) 151 475 8888

ACC Liverpool is a world-class facility in a unique setting conveniently located on the banks of the River Mersey at the heart of the city's iconic waterfront and only a short walk from the city centre.

HOW TO REACH THE VENUE

From Liverpool Lime Street train station

ACC Liverpool is a 20-minute walk from Lime Street or a short taxi ride. You can also transfer at Lime Street onto the Merseyrail Wirral Line trains to James Street station (10-minute walk) or catch the CityLink bus which runs every 12 minutes as a circular service around the city centre and stops at both Liverpool Lime Street and ACC Liverpool. If travelling from outside Merseyside, you can catch a Merseyrail train to James Street station from Lime Street, inclusive in the cost of your ticket.

From the Liverpool ONE bus station

ACC Liverpool is just a five minute walk from the Liverpool ONE retail development bus station, which also has long distance coach services. Local services connect to a shuttle bus service. For door-to-door service, there are drop-off areas and dedicated coach parking right next door.

From Liverpool John Lennon Airport

- **500** Arrival airport flyer bus Service

Runs between Liverpool Airport and Liverpool ONE bus station. Runs every 30 mins and you can catch it at Bus Stop 1 outside the terminal. The journey to the city centre takes approximately 35 mins. Payment can be made on the bus by cash only, ATMs are available inside the Airport.

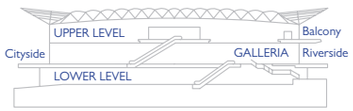
- **86 / 86A / 86D**

Runs from Liverpool Airport (Stand 3) to Liverpool City Centre - Liverpool ONE bus station via South Parkway. Runs every 20-30 minutes. Travel time is 8 mins to South Parkway and approx. 45 mins to the city centre. The 86/86A run 24/7 every 30 mins.

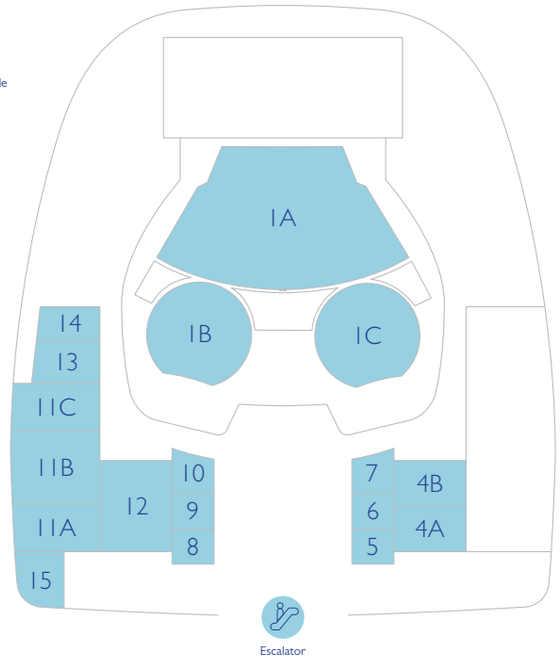
- **80A**

Runs from Liverpool Airport (Stand 3) - Speke - Liverpool City Centre (Hanover Street) via South Parkway every 15-30 mins. Travel time 15 mins to Liverpool South Parkway, 40 mins to Liverpool City Centre.

FLOOR PLAN

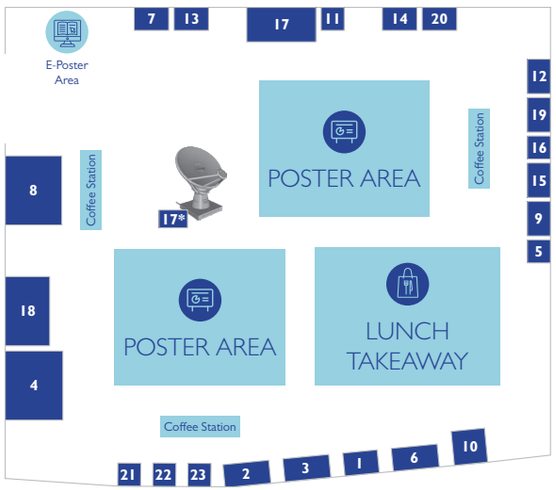


UPPER LEVEL



1	Royal Astronomical Society
2	LJMU ARI
3	LJMU ARI
4	ESO
5	Oxford University Press
6	European Solar Telescope
7	Springer
8	ESA
9	SALT
10	Jodrell Bank Observatory
11	Princeton University Press
12	The Royal Society Publishing
13	Cambridge University Press
14	IOP Publishing
15	Frontiers
16	CRC Press
17	SKA
17*	SKA Telescope
18	Science & Technology Facilities Council
19	EAS
20	Astronomy & Astrophysics
21	LJMU FET
22	LJMU FET
23	LJMU FET

Escalator



LOWER LEVEL

PRACTICAL INFORMATION

Registration & Accommodation Desk

The registration and accommodation desk is open during the following hours:

- **Monday 2nd April** ..... 16:00 - 18:00
- **Tuesday 3rd April** ..... 8:00 - 18:00
- **Wednesday 4th April** ..... 8:00 - 18:00
- **Thursday 5th April** ..... 8:00 - 18:00
- **Friday 6th April** ..... 8:00 - 14:00

Registration fee for participants includes

Admission to the scientific sessions, congress documents including badge and printed programme, all lunches and coffee breaks, access to the exhibition area, posters & e-poster area.

Registration fee for participants does not include

Accommodation, conference dinner (reservation required), welcome reception, excursions, travel expenses, personal insurance.

Name Badges

Conference badges must be worn at all times during congress activities. The badge is required for admission to sessions and social activities that are included in the registration. Admission will be denied to anyone not wearing their name badge.

Lunch

Lunch is included in the registration fee and will take place everyday from 13:00 – 14:30 in the Exhibition hall (lower level). Lunches must also be collected from the Exhibition hall by all attendees of Lunch Sessions.

Social Media

The official Twitter account for the congress is @EWASS2018 and the official hashtag is #EWASS2018 – this social media account is operated by the local organisers.

Certificate of Attendance

A certificate of attendance will be e-mailed to all registered participants after the congress.

Wi-Fi

Wireless Internet access is available free of charge at the venue in all rooms.

1. Connect to the Free_Wifi SSID (wireless network)
2. Browse to a web site of your choice, e.g. www.accliverpool.com
3. You will be re-directed to the ACC Liverpool landing page
4. Click on the 'FREE WI-FI ACCESS' button
5. The page of your choice will then load.

Congress Secretariat

Kuoni Congress

- **Phone** +41 79 771 07 54
- **E-mail** ewass2018@kuoni.com

Local Organisers

During EWASS 2018, the local organisers can be reached via e-mail: ewass2018@ljmu.ac.uk, or via phone: +44 (0) 151 231 2906 (8:00 – 20:00 only).

Harassment Helpline

If you feel harassed or are privy to, or observe, any form of bullying or harassment during EWASS 2018 and you wish to report it, anonymously or otherwise, you can call our harassment hotline on +44 (0) 151 231 2934 or +44 (0) 7802 877 698 throughout the full duration of the meeting, 24 hours a day. Astronomy Allies can be contacted via astronomyallies@gmail.com or @AstronomyAllies.

Invoices

Invoices will be sent after the congress upon request only. Please send requests to ewass2018@kuoni.com. For other arrangements, please visit the registration desk.

Poster Prizes

Prizes will be awarded for the best student and postdoc posters. Winners will be announced at the Conference Dinner.

PLENARY TALKS

Tuesday, 3 April at 11:30
The Cassini mission to Saturn: 13 years of discovery
Emma Bunce, University of Leicester, UK

Tuesday, 3 April at 12:00
Multi-fluid solar chromosphere
Elena Khomenko, Instituto de Astrofísica de Canaries, Spain

Tuesday, 3 April at 12:30
AAS Russell Lecture
Fifty-four years of adventures in infrared astronomy
The 2017 AAS Henry Norris Russell Lecture was awarded to Eric Becklin, University of California, Los Angeles, United States

Wednesday, 4 April at 12:30
Cosmological hydrodynamical simulations
Joop Schaye, Leiden University, Netherlands

Thursday, 5 April at 12:00
Community Session

Thursday, 5 April at 13:15
Equity and Diversity Session - Sponsored by Nature and Nature Astronomy
Invited speaker: Chi Onwurah MP
Shadow Minister, Department for Business, Energy and Industrial Strategy, Industrial Strategy, UK

Friday, 6 April at 11:00
ESO Report: The ESO programme and its role in European astronomy
Xavier Barcons, ESO Director General

Friday, 6 April at 11:30
ESA Report: Exploration of the Universe
Günther Hasinger, ESA Director of Science

Friday, 6 April at 12:00
The Square Kilometre Array (SKA): A physics machine for the 21st Century
Philip Diamond, SKA Director General

Friday, 6 April at 12:30
Birth and perspectives of gravitational-wave and multi-messenger astronomy
Marica Branchesi, Università Degli Studi Di Urbino "Carlo Bo", Italy

EAS PRIZE AWARD LECTURES

Wednesday, 4 April at 11:00, MERAC Prize in Theoretical Astrophysics
The 2018 MERAC Prize in Theoretical Astrophysics is awarded to Sandrine Codis, IAP, Paris, France

Wednesday, 4 April at 11:30, MERAC Prize in Observational Astrophysics
The 2018 MERAC Prize in Observational Astrophysics is awarded to Renske Smit, University Of Cambridge, Cambridge, United Kingdom

Wednesday, 4 April at 12:00, MERAC Prize in New Technologies
The 2018 MERAC Prize in New Technologies is awarded to Martin Pertenais, German Aerospace Center (DLR e.V.), Berlin, Germany

Thursday, 5 April at 11:00, Tycho Brahe Prize
The 2018 Tycho Brahe Prize is awarded to Andrzej Udalski, Warsaw University Observatory, Warszawa, Poland

Thursday, 5 April at 11:30, EAS Lodewijk Woltjer Lecture
The 2018 EAS Lodewijk Woltjer Lectureship is awarded to Conny Aerts, Institute of Astronomy, Faculty of Science, KU Leuven, Leuven, Belgium

OTHER EVENTS

Tuesday, 3 April, from 13:15 to 14:15
UKSP Business Lunch
Room 4A

Tuesday, 3 April, from 13:15 to 14:15
Outreach Lunch
Room 11C

Wednesday, 4 April, from 13:15 to 14:15
Media Training Workshop Lunch
Room 4A

Wednesday, 4 April, from 13:15 to 14:15
Publishing in astronomy: workshop for authors and referees
Room 4B

Wednesday, 4 April, from 13:15 to 14:15
European Regional Office of Astronomy for Development
Room 11A

Wednesday, 4 April, from 13:15 to 14:15
JWST Users' Town Hall Lunch
Room 11B

Thursday, 5 April, from 13:15 to 14:15
Open discussion around Africa-Europe research collaborations
Room 4B

Friday, 6 April, from 13:30 to 14:30
Nova Lunch
Room 4B

Friday, 6 April, from 9:00 to 18:00
Hack/Market day
Rooms 5, 6 and 8

SOCIAL & PUBLIC PROGRAMME

Welcome Reception

Tuesday, 3 April 18:30 - 20:30

The Welcome Reception will start in the Auditorium with a special performance from Operation Lightfoot.
The drinks reception will be served afterwards in the Exhibition hall.

Pre-registration required.

Student Reception

Wednesday, 4 April 19:00 - 00:00

A simple, informal occasion for Masters and PhD students to meet and exchange their experience. This event will take place at OhMeOhMy and is free of charge.

Pre-registration is required.

OhMeOhMy, West Africa House, 25 Water Street, Liverpool L2 0RG

Football Tournament

Wednesday, 4 April 18:30 - 22:00

The world-famous NAM five-a-side tournament will take place at the Peter Lloyd Leisure Centre. As EWASS is a European-wide event, entries from everyone attending are welcome – entries are NOT limited to UK departments/players. All players must present valid EWASS2018 delegate ID in order to gain entry to the Leisure Centre facilities.

Pre-registration is required.

Conference Dinner and Award Ceremony

Thursday, 5 April 18:45 - 23:00

This year, the Conference Dinner will take place at the beautiful Liverpool Cathedral, which boasts both the world's highest and widest gothic arches and also the highest and heaviest peal of bells. This event will be hosted by the brilliant impressionist and comedian Jon Culshaw, who is also an astronomy enthusiast, and RAS Fellow.

Pre-registration required.

Liverpool Cathedral, St James Mount, Liverpool L1 7AZ

Public Lecture - Brave new worlds: the planets in our Galaxy by Giovanna Tinetti

Friday, 6 April 18:30 @ The Redmonds Building, Brownlow Hill, Liverpool, L3 5UG

To round off EWASS/NAM 2018, this free public lecture is open to, and suitable for everyone. Professor Tinetti will ask whether Earth is just special to us, or whether it is special as a planet? Every star we can see in the night sky is likely to be orbited by planets. Some of them are freezing cold, some are so hot that their surface is molten. But beyond that our knowledge falters: What are they made of? How did they form? What's the weather like there? Are they habitable? Finding out why are these new worlds as they are and what is the Earth's place in our Galaxy and - ultimately - in the Universe, is one of the key challenges of modern astrophysics.

No tickets are required - just come along on the evening.

Full details are here: https://www.events.iop.org/e/brave-new-worlds-the-planets-in-our-galaxy-af4febe86f2740ffb210c217c603e4bf/page.html

PROGRAMME OVERVIEW

Tuesday, 3 April

09:00	Parallel Sessions
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	Lunch Sessions
13:00	**LUNCH**
14:30	Parallel Sessions
16:00	**COFFEE BREAK**
16:30	Parallel Sessions
18:00	Close
18:30	Welcome Reception

Wednesday, 4 April

09:00	Parallel Sessions
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	Lunch Sessions
13:00	**LUNCH**
14:30	Parallel Sessions
16:00	**COFFEE BREAK**
16:30	Parallel Sessions
18:00	Close
18:30	Football Tournament
19:00	Student Reception

PROGRAMME OVERVIEW

Thursday, 5 April

09:00	Parallel Sessions
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	Lunch Sessions
13:00	**LUNCH**
14:30	Parallel Sessions
16:00	**COFFEE BREAK**
16:30	Parallel Sessions
18:00	Close
18:45	Conference Dinner

Friday, 6 April

09:00	Parallel Sessions
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:00	Lunch Sessions
13:30	**LUNCH**
14:30	Parallel Sessions
16:00	**COFFEE BREAK**
16:30	Parallel Sessions
18:00	Close
18:30	Public Lecture

SYMPOSIA

S1	INSTRUMENTATION: Early science with JWST **Gillian Wright** Room 11B / Tuesday (p20) & Wednesday (p38)
S2	MILKY WAY: Gaia: The billion-star galaxy census: at the threshold of Gaia data release 2 **Anthony Brown** Hall 1B / Thursday (p54) & Friday (p71)
S3	GALAXIES: Galaxy formation through cosmic time: synergising theory and observations in the era of large facilities **Pratika Dayal** Hall 1C / Wednesday (p39) & Thursday (p55)
S4	SOLAR PHYSICS: High resolution solar physics – the dawn of a new era **Sarah Matthews** Room 4A / Thursday (p56) & Friday (p73)
S5	STRONG GRAVITY: Relativistic astrophysics, in memory of Stephen Hawking **Norbert Schartel** Hall 1A / Tuesday (p21) & Wednesday (p40)
S6	SOFTWARE: Software in astronomy **Alice Allen** Room 11A / Wednesday (p41) & Thursday (p57)
S7	TRANSIENTS: Supernova diversity: prospects and challenges for next-generation surveys **Maria Teresa Botticella** Room 12 / Tuesday (p22) & Wednesday (p42)
S8	STAR FORMATION: The formation of stars and planets **Derek Ward-thompson** Hall 1A / Thursday (p58) & Friday (p75)
S9	STAR FORMATION: The interstellar medium as a window onto galaxy evolution **Christopher Clark** Hall 1B / Tuesday (p24) & Wednesday (p43)
S10	PLANETS: The physics and chemistry of planetary atmospheres **Christiane Helling** Room 11C / Wednesday (p45) & Thursday (p60)
S11	COSMOLOGY: Weak and strong-lensing techniques to unveil mysteries of the Universe **Mathilde Jauzac** Room 11B / Thursday (p61) & Friday (p77)

LUNCH SESSIONS

LS1	Equity and diversity in astronomy. **Sponsored by Nature Astronomy and Nature** **Helen Jermak** Hall 1A / Thursday / 13:15 - 14:15 **13:00** Diversity and Policy Making in Science, **Chi Onwurah** UK Parliament, London, **13:45** Ensuring equal treatment of applicants for grants by the European Research Council: Focus on Gender Balance **Luis Farina-Busto** European Research Council, Brussels, Belgium
LS2	ESA M5 candidates annule **Cancelled** **Dave Clements**
LS3	Publishing in astronomy: workshop for authors and referees **Kim Clube** Room 4B / Wednesday / 13:15 - 14:15
LS4	UKSP Business Lunch **Mihalis Mathioudakis** Room 4A / Tuesday / 13:15 - 14:15
LS5	Hack/Market day **Matteo Bachetti** Room 6 / Friday / 13:30 - 14:30
LS6	Outreach Lunch **Sheila Kanani** Room 11C / Tuesday / 13:15 - 14:15
LS7	Open discussion around Africa-Europe research collaborations **Mirjana Povic** Room 4B / Thursday / 13:15 - 14:15 **Vanessa McBride** IAU-OAD, South Africa **Melvin Hoare** DARA representative, University of Leeds, United Kingdom **Nana Ama Browne Klutse** GSSTC, Ghana **Ernst Van Groningen** ISP representative, Uppsala University, Sweden **Takalani Nemaungani** DST, South Africa **Mike Bode** EAS special representative to the EU, BIUST, Botswana **George Miley** European ROAD representative, Leiden University, Netherlands This special session has been supported financially by the UK Science and Technology Facilities Council (STFC), Royal Astronomical Society (RAS) and Office of Astronomy for Development (OAD - IAU), European Astronomical Society (EAS), International Science Programme (ISP), Development in Africa with Radio Astronomy (DARA), and local African and European institutions of participants.
LS8	Media Training Workshop **Jake Gilmore** Room 4A / Wednesday / 13:15 - 14:15
LS9	JWST Users' Town Hall **Antonella Nota** Room 11B / Wednesday / 13:15 - 14:15
LS10	Nova Lunch **Luca Izzo** Room 4B / Friday/ 13:30 - 14:30
LS11	European Regional Office of Astronomy for Development **Kevin Govender** Room 11A / Wednesday / 13:15 - 14:15 **13:15** Welcome and overview, **Kevin Govender** **13:20** Astronomy for Development Globally, **Vanessa McBride** **13:30** European Regional Office of Astronomy for Development, **George Miley** **13:40** Discussion, **Kevin Govender** **14:10** Closing and way forward

SPECIAL SESSIONS

SS1 GALAXIES: Active galactic nuclei: environment, triggering, life cycle, and feedback
Jeremy Harwood Hall 1C / Friday (p78)

SS2 OUTREACH: Art space: using artistic media for outreach and science communication in astronomy, Solar physics and space science
Helen Mason Room 14 / Wednesday (p46)

SS3 STRONG GRAVITY: Astrophysical jets in the era of multi-messenger astronomy
Dr. Serguei Komissarov Room 12 / Thursday (p62)

SS4 STARS: Atomic and molecular data needs for astronomy and astrophysics
Maria Teresa Belmonte Room 13 / Friday (p80)

SS5 MILKY WAY: Complex organic molecules in the Universe: current understanding and perspectives
Izaskun Jimenez-Serra Room 13 / Wednesday (p47)

SS6 MILKY WAY: Dust formation by evolved stars and supernovae
Ilse De Looze Room 14 / Thursday (p63)

SS7 DIVERSITY: Equity and diversity in astronomy "Sponsored by Nature and Nature Astronomy"
Helen Jermak Room 4B / Thursday (p65)

SS8 OUTREACH: Engaging the public with astronomy and space science research
Heather Campbell Room 11C / Tuesday (p25)

SS9 OUTREACH: European forum of astronomical communities
Jan Palous Room 5 / Thursday (p66) / 14:30 - 16:00

SS10 COSMOLOGY: Exploring the high-redshift Universe in the year of JWST
Renske Smit Room 11A / Friday (p82)

SS11 INSTRUMENTATION: Exploring the Universe: a European vision for the future of VLBI
Tiziana Venturi Room 5 / Wednesday (p49)

SS12 SOLAR PHYSICS: Flares in the lower atmosphere of the Sun and stars
Lyndsay Fletcher Room 4A / Tuesday (p27)

SS13 GALAXIES: Galaxy clusters and groups across cosmic time
John Stott Room 12 / Friday (p83)

SS14 TRANSIENTS: Gamma-ray bursts, hypernovae, and superluminous supernovae: energetic cosmic explosions 20 years after SN 1998bw
Maria Grazia Bernardini Room 13 / Thursday (p67)

SS15 SOFTWARE: Hack/Market day
Matteo Bachetti Room 5, 6 and 8 / Friday (p85)

SS16 MILKY WAY: Hello, goodbye: understanding the duality of the Milky Way
Luca Casagrande Room 13 / Tuesday (p28)

SS17 OUTREACH: Making the case for European astronomy and space science: public and political engagement
Anita Heward Room 5 / Thursday (p68) / 16:30 - 17:00

SS18 STRONG GRAVITY: Multimessenger Astronomy with gravitational waves
Shiho Kobayashi Room 11C / Friday (p86)

SPECIAL SESSIONS

SS19 STARS: Multiple populations in massive star clusters – a common thread through cosmological ages?
William Chantereau Room 4B / Wednesday (p50)

SS20 INSTRUMENTATION: Multi wavelength polarimetry
Andy Shearer Room 14 / Tuesday (p29)

SS21 COSMOLOGY: Opening new frontiers in cosmology with the Square Kilometre Array
Ian Harrison Room 11A / Tuesday (p31)

SS22 STARS: Open problems in modelling chemical element transport in stars
Maurizio Salaris Room 6 / Tuesday (p32)

SS23 OUTREACH: Reflection on European – African research collaborations in astronomy and space science: opportunities, achievements, challenges, and needs
Mirjana Povic Room 5 / Thursday (p69) / 09:00 - 10:30

SS24 GALAXIES: Resolving stars and gas in the central kiloparsec: clues to disk galaxy evolution
Herve Wozniak Room 4B / Tuesday (p33)

SS25 TRANSIENTS: Supernovae as cosmological probes
Steven Williams Room 6 / Thursday (p70)

SS26 INSTRUMENTATION: Surveys in the ELT era
Lex Kaper Room 14 / Friday (p88)

SS27 PLANETS: The Alpha Centauri system as a benchmark for stellar and planetary systems
Pedro J. Amado Room 5 / Tuesday (p34)

SS28 SOLAR PHYSICS: The causes and consequences of space weather
Rachel Howe Room 4A / Wednesday (p51)

SS29 TRANSIENTS: The state of the art and future of panchromatic nova science
Luca Izzo Room 4B / Friday (p89)

SS30 INSTRUMENTATION: Toward the next generation of integral field spectrographs: ideas, designs and developments
Ariadna Calcines-Rosariot Room 6 / Wednesday (p53)

SS31 GALAXIES: Unveiling the low surface brightness Universe: the new era of deep-wide surveys
Sugata Kaviraj Hall 1C / Tuesday (p36)

TUESDAY, 3 APRIL

Room 11B — S1 INSTRUMENTATION: Early science with JWST

Chairs: **Gillian Wright, Pierre-Olivier Lagage, Patrice Bouchet**

09:00	Welcome and JWST Mission Status **Antonella Nota**
09:50	The Transiting Exoplanet Community Early Release Science Program **Hannah Wakeford**
10:15	Atmospheric characterization of directly imaged exoplanets with JWST/MIRI **Camilla Danielski**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	A spectroscopic phase curve of a hot Jupiter with MIRI LRS as part of the transiting exoplanet ERS program **Nicolas Crouzet**
14:45	Decoding Smoke Signals in the Glare of a Wolf-Rayet Binary with JWST **Peredur Williams**
15:10	Radiative Feedback from Massive Stars as Traced by Multiband Imaging and Spectroscopic Mosaics **Emilie Habart**
15:35	Star formation in the Local Group with NIRSpec and NIRCam **Guido De Marchi**
16:00	**COFFEE BREAK**
16:30	Nuclear Dynamics of a Nearby Seyfert with NIRSpec Integral Field Spectroscopy **Eugene Vasiliev**
16:55	JWST observations of nearby star-forming galaxies **Jacco Van Loon**
17:10	A JWST Study of Starburst-AGN Connection in Merging LIRGs **Vassilis Charmandaris**
17:35	Q-3D: Imaging Spectroscopy of Quasar Hosts with JWST Analyzed with a Powerful New PSF Decomposition and Spectral Analysis Package **Dominika Wylezalek**
18:00	Close

TUESDAY, 3 APRIL

Hall 1A — S5 STRONG GRAVITY: Relativistic Astrophysics, in memory of Stephen Hawking

Chair: **Paul McNamara, Stefanie Komossa**

09:00	Stephen Hawking - An Appreciation **Martin Rees - Lord Rees of Ludlow**
09:15	Tests of General Relativity with Neutron Stars Binaries **Michael Kramer**
09:30	Testing Gravity with PSR J1411-6545 **Evan Keane**
09:45	A deep look at Pulsar Wind Nebulae with H.E.S.S.: the cases of HESS J1825-137 and Vela X **Sami Caroff**
10:00	Super-Eddington accretion on to a magnetized neutron star **Anna Chashkina**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	The New Landscape of Multi-Messenger Astronomy **Joan Centrella**
15:00	From LISA Pathfinder to LISA **Paul McNamara**
15:30	Merger rates and masses of double compact objects **Coenraad Neijssel**
15:45	Binary TDEs: Modeling the hills mechanism in the restricted 3 body problem **Harriet Brown**
16:00	**COFFEE BREAK**
16:30	General Relativistic Modeling of Tidal Disruption Events **Jane Dai**
17:00	A luminous dust-enshrouded tidal disruption event with a resolved radio jet **Miguel Perez Torres**
17:30	"Black Hole Mergers induced by tidal encounters with a Galactic Centre Black Hole" **Joseph Fernandez**
17:45	XMM-Newton's impact on Relativistic Astrophysics **Norbert Schartel**
18:00	Close

Room 12	S7 TRANSIENTS: Supernova diversity: prospects and challenges for next-generation surveys Chair: **Maria Teresa Botticella**
09:00	Observational variety of thermonuclear Supernovae **Maximilian Stritzinger**
09:20	Models of thermonuclear supernova explosions **Stuart Sim**
09:40	Type Ia Supernovae diversity and the parent galaxy type **Laura Greggio**
09:52	Supernova lax explosion sites: exploring SN diversity in environmental diagnostics **Joe Lyman**
10:04	Between normal and sub-luminous: Insights from two transitional type Ia SNe **Christa Gall**
10:16	The rate of 'Ca-rich' supernovae from the Palomar Transient Factory **Christopher Frohmaier**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Core-collapse supernova progenitors **Morgan Fraser**
14:50	Core-collapse SNe: observational constraints **Joseph Anderson**
15:10	The diversity of core-collapse supernovae: spectral models from the lowest to the highest mass stars **Anders Jerkstrand**
15:22	Light curve and spectral calculations for type II supernovae **Luc Dessart**
15:34	Hydrogen-rich supernovae beyond the neutrino-driven core-collapse paradigm **Giacomo Terreran**
15:46	Constraining type II supernova progenitors from spectral and photometric analysis **Claudia Gutiérrez**

TUESDAY, 3 APRIL

16:00	**COFFEE BREAK**
16:30	Superluminous supernova diversity **Cosimo Inserra**
16:50	Multiband view of the the closest type I superluminious supernova 2017egm/Gaia17biu in a "normal" metal rich spiral galaxy **Subhash Bose**
17:02	A Circumstellar Shell Around a Superluminous Supernova Revealed in a Light Echo **Ragnhild Lunnan**
17:14	Rapidly Evolving and Peculiar Transients **Maria Drout**
17:34	Explosion physics and progenitors from modern one-day supernova searches: a few recent discoveries **Leonardo Tartaglia**
17:46	Rapidly Evolving Transients in the Dark Energy Survey **Miika Pursiainen**
18:00	Close

Hall 1B — S9 STAR FORMATION: The interstellar medium as a window onto galaxy evolution

Chair: **Christopher Clark**

09:00	Welcome and introduction **Christopher Clark**
09:05	Ionized tracers of the ISM **Kathryn Kreckel**
09:30	Testing Star Formation Laws With ALMA On A High Redshift Lensed Galaxy **Piyush Sharda**
09:45	The role of atomic hydrogen in regulating the scatter of the mass–metallicity relation **Toby Brown**
10:00	The unusual ISM in Blue and Dusty Gas Rich Sources (BADGRS) **Loretta Dunne**
10:15	The Volumetric Star Formation law: a universal relation for nearby late-type galaxies **Cecilia Bacchini**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Early dust enrichment of the ISM in the epoch of reionisation **Darach Watson**
14:52	Molecules as tracers of star formation, feedback, and chemistry. **Susanne Aalto**
15:15	Gas inflow and outflow revealed in the ISM and CGM of an interacting high-redshift galaxy hosting a bright gamma-ray burst **Philip Wiseman**
15:30	Disc formation in cosmological simulations of Milky Way analogues: mergers, gas-flows and feedback **Robert John Grand James**
15:45	The Star-Formation Law at GMC Scales in M33 **Thomas Williams**
16:00	**COFFEE BREAK**
16:30	Cosmic evolution of synthetic nebular emission lines of simulated galaxies **Michaela Hirschmann**
16:50	Atomic Carbon as a Cold Gas Tracer at z=1 **Nathan Bourne**
17:05	SHARDS: Constraints on the dust attenuation law of star-forming galaxies at z~2 **Monica Tress**
17:20	Investigating dust heating in nearby galaxies through 3D radiative transfer modelling **Sam Verstocken**
17:35	The Interstellar Medium of Nearby Galaxies at High Physical Detail **Andreas Schruba**
18:00	Close

TUESDAY, 3 APRIL

Room 11C — SS8 OUTREACH: Engaging the public with astronomy and space science research

Chair: **Heather Campbell**

09:00	IAU100 Years: Uniting our World to Explore the Universe **Jorge Rivero Gonzalez**
09:20	How do I know if I'm having impact and could I do it better? Practical tools and tips for effective evaluation of public engagement and outreach. **Sarah Jenkins**
09:40	RAS200: Engaging diverse partners and diverse audiences with astronomy and geophysics outreach and engagement. **Sheila Kanani**
09:50	Accessing underserved audiences by engaging communities **Olivia Keenan and Hannah Renshall**
10:00	Poster short presentation
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Bluedot: a festival of science, music & culture **Teresa Anderson**
14:50	The Tactile Universe: Engaging the vision impaired community with accessible astrophysics research **Nicolas Bonne**
15:10	Galaxy Makers: Expanding & Evaluating Exhibitions Through the use of an Online Component **Josh Borrow**
15:20	Research in Schools Projects on Space Physics and Astronomy: Evaluation, Impact and Good Practice **Martin Archer**
15:30	Communicating astrophysics to diverse audiences through interdisciplinary research in astro-ecology **Claire Burke**
15:40	Lessons learned from 50 years of the International Astronomical Youth Camp **Hannah Dalgleish**
15:50	Discussion

16:00	**COFFEE BREAK**
16:30	The ESO Supernova Planetarium & Visitor Centre: creating a global resource locally **Chris Harrison**
16:50	Public engagement with JWST in the UK **Olivia Johnson**
17:10	EU Space Awareness: Lessons Learnt from an Educational and Outreach Project to Inspire the Next Generation of Space Explorers **Wouter Schrier**
17:20	Gravitational Interactions: communicating gravitational waves **Chris North**
17:30	Integrating Generic Learning Outcomes to the National Schools' Observatory Project **Stacey Habergham-Mawson**
18:00	Close

TUESDAY, 3 APRIL

Room 4A — SS12 SOLAR PHYSICS: Flares in the lower atmosphere of the Sun and stars

Chair: **Lyndsay Fletcher**

09:00	Similarities and Differences between Solar and Stellar Flares **Adam Kowalski**
09:30	Multi-wavelength observations of major solar flares **Lucia Kleint**
10:00	Modelling of Electron and Proton Beams in a White-light Solar Flare **Ondrej Prochazka**
10:15	High cadence observations of solar flare transition region turbulence with IRIS **Natasha Jeffrey**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Superflares on solar-type stars **Yuta Notsu**
15:00	Flares and CMEs in M-stars **Eike Guenther**
15:15	High Cadence Detections Of Stellar Flares With The Next Generation Transit Survey **James Jackman**
15:30	Quasi-periodic Pulsations in Stellar Flares: a Tool for Studying the Solar-Stellar Connection **Anne-Marie Broomhall**
15:45	Modelling gyrosynchrotron radiation from stellar flares on T-Tauri stars **Charlotte Waterfall**
16:00	**COFFEE BREAK**
16:30	Energetics, particle acceleration and turbulence in solar flares **Eduard Kontar**
17:00	Simulations of chromospheric HXR flare sources in multithreaded convergent flare loops **Michal Varady**
17:15	3D Magnetic Reconnection in a Collapsing Coronal Loop System **Shane Maloney**
17:30	NuSTAR X-ray observations of tiny solar flares **Iain Hannah**
17:45	Fermi Large Area Telescope observations of the flaring Sun **Melissa Pesce Rollins**
18:00	Close

Room 13 — SS16 MILKY WAY: Hello, goodbye: understanding the duality of the Milky Way

Chair: **Luca Casagrande**

09:00	The (dual) nature of the Galactic halo **Amina Helmi**
09:30	The dual nature of the Galactic disc **Šarūnas Mikolaitis**
10:00	The Dual Nature of the Galactic Bulge **Chris Wegg**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Towards understanding the Milky Way [a/Fe] bimodality using the EAGLE simulations **Ted Mackereth**
14:49	More exciting than dual - Disc Galaxy Components in Evolution **Ralph Schoenrich**
15:06	Understanding the duality of the Galactic disc and its structures **Lia Athanassoula**
15:24	Global properties of simulated stellar haloes of Milky Way-type galaxies **Andreea Font**
15:45	Can accreted and in situ halo substructures be kinematically distinguished? A new dynamical perspective **Theo Le Bret**
16:00	**COFFEE BREAK**
16:30	VVV constrains the age distribution of the Milky Way bulge **Marina Rejkuba**
16:49	No X-shape in the Milky Way bulge **Martín López-Corredoira**
17:07	The GALAH survey: The ancient Milky Way thin and thick disk **Martin Asplund**
17:25	How to interpret the dual properties of the Milky Way stellar populations **Paola Di Matteo**
17:50	General Discussion
18:00	Close

TUESDAY, 3 APRIL

Room 14 — SS20 INSTRUMENTATION: Multi wavelength polarimetry

Chair: **Andy Shearer**

09:00	Optical spectropolarimetry: lessons learnt in the past decade, and new challenges for the future **Stefano Bagnulo**
09:30	Optical Polarimetry of KIC 8462852 **Iain Steele**
09:40	SPLOT: a Snapshot survey for Polarised Light in Optical Transients **Adam Higgins**
09:50	Optimised Multicolour Optical Polarimetry and Rapid Follow-up of polarised transients **Helen Jermak**
10:00	Optical polarimetry within the changing-look AGN scenario **Beatriz Agís González**
10:10	Discussion
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Present status and future prospects of space based X-ray and gamma-ray polarimetry. **Philippe Laurent**
14:55	Simulating X-ray polarisation signals of supernova remnants with IXPE/eXTP **Ping Zhou**
15:05	Modeling the time-dependence of reprocessed optical and UV emission of AGN **Patricia Andrea Rojas Lobos**
15:15	The Imaging X-ray Polarimetry Explorer (IXPE) Mission **Luca Baldini**
15:25	Thermal emission and polarimetry of strongly magnetized neutron stars **Denis Gonzalez-Caniulef**
15:35	Polarisation of hard X-ray and microwave emission generated by electrons beams in solar flares **Valentina Zharkova**

16:00	**COFFEE BREAK**
16:30	Unlocking the Magnetized Universe **Carole Mundell**
16:55	Polarised Optical and Radio Emission from Gamma-Ray Burst Jets **Shiho Kobayashi**
17:05	Search for primordial B-modes in the CMB polarization with LSPE/SWIPE **Luca Lamagna**
17:15	The POGS Project: POlarization from the GLEAM Survey **Christopher Riseley**
17:25	The C-Band All Sky Survey **Adam Barr**
17:35	The LSPE/STRIP instrument: measuring large-scale polarization in the Northern millimeter sky. **Federico Incardona**
17:45	Discussion
18:00	Close

TUESDAY, 3 APRIL

Room 11A — SS21 COSMOLOGY: Opening new frontiers in cosmology with the Square Kilometre Array

Chair: **Ian Harrison**

09:00	Cosmology with the SKA **Richard Battye**
09:25	Square Kilometre Array capabilities for Cosmology and fundamental physics **Anna Bonaldi**
09:50	Cosmology from the Epoch of Reionisation **Catherine Watkinson**
10:15	A new approach to photon propagation in semi-numerical reionisation models **Margherita Molaro**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Cosmology with HI intensity mapping: MeerKAT and the SKA **Mario Santos**
14:55	Systematic Limitations of Future Large-Scale HI Surveys **Stuart Harper**
15:10	A scale dependent bias on linear scales : prospects for HI intensity mapping with the SKA **Aurelie Penin**
15:25	Using HI Intensity Mapping to Calibrate Photometric Redshifts **Steve Cunnington**
16:00	**COFFEE BREAK**
16:30	Weak gravitational lensing with the Square Kilometre Array **Michael Brown**
16:55	Constraining galaxy evolution with new Radio Luminosity Functions **Josephine Peters**
17:10	Exploiting cross-beam information in hierarchical phased-array imaging **Matthieu Simeoni**
17:25	Magnetic fields forever. **Franco Vazza**
18:00	Close

Room 6 — SS22 STARS: Open problems in modelling chemical element transport in stars

Chair: **Maurizio Salaris**

09:00	Element transport in stars: theoretical issues **Santi Cassisi**
09:30	Atomic diffusion in main sequence stars: Induced hydrodynamical instabilities and impact on seismic parameters **Morgan Deal**
09:50	Carbon and nitrogen in testing evolutionary properties of giant stars **Grazina Tautvaisiene**
10:10	New population synthesis approach : an open window to constrain extra-mixing in red-giant stars. **Nadege Lagarde**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Constraints on the modelling of convection and other chemical transport processes in stars from hydrodynamical simulations **Vincent Prat**
15:00	Investigating Convective Overshoot in White Dwarfs **Tim Cunningham**
15:20	Enhanced Rotational Mixing in Massive Stars **Adam Jermyn**
15:40	Anisotropic turbulent transport in stellar radiation zone **Louis Amard**
16:00	**COFFEE BREAK**
16:30	Asteroseismic constraints on the modelling of angular momentum and element transport in stars **Conny Aerts**
17:00	Constraining additional mixing processes using observed helium signature in the oscillation frequencies from {\it Kepler} **Kuldeep Verma**
17:20	The shape of convective core overshooting and envelope mixing from gravity-mode asteroseismology **May Gade Pedersen**
17:40	Summary and final comments **Dr Andrea Miglio and Maurizio Salaris**
18:00	Close

TUESDAY, 3 APRIL

Room 4B — SS24 GALAXIES: Resolving stars and gas in the central kiloparsec: clues to disk galaxy evolution

Chair: **Herve Wozniak**

09:00	Review-- Overview and recent submillimeter results **Francoise Combes**
09:30	Parsec scale views of the molecular gas in nearby galaxy centres **Timothy Davis**
09:50	Survival of cold gas in a stellar feedback driven outflow in NGC 3351 seen with MUSE and ALMA **Ryan Leaman**
10:10	The dust cycle in the central square kiloparsec of the Triangulum spiral galaxy **Jacco Van Loon**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Optical and Near-Infrared Integral-Field Spectroscopy of the Central Kiloparsec: a Review **Dimitri Gadotti**
15:00	Properties of decoupled stellar structures in the inner regions of galaxies **Lodovico Coccato**
15:20	Unraveling disc galaxy evolution through the formation of central substructures **Marja Seidel**
15:40	Interpreting the inner Disc Structure **Ralph Schoenrich**
16:00	**COFFEE BREAK**
16:30	M31 bulge observed by SITELLE at CFHT **Anne-Laure Melchior**
16:50	Nuclear activity and star formation in nearby AGN observed with near-infrared integral-field spectroscopy **Nastaran Fazeli**
17:10	Physical properties of the ISM in nearby AGN from the MAGNUM survey **Giacomo Venturi**
17:30	Nuclear bars and disks at the centres of galaxies **Victor Debattista**
18:00	Close

Room 5 — SS27 PLANETS: The Alpha Centauri system as a benchmark for stellar and planetary systems

Chair: **Pedro J. Amado**

09:00	How well do we know the Alpha Centauri stellar system ? **Pierre Kervella**
09:25	Defining the architecture of the Proxima Centauri planetary system: evidence for dust belts **Guillem Anglada**
09:45	Searching for faint comoving companions to the α Centauri system in the VVV survey infrared images **Valentin Ivanov**
10:00	Measuring the radial velocity of Alpha Centauri **Maksym Lisogorskyi**
10:15	Detection of Alpha Centauri at radio wavelengths: chromospheric emission and search for star-planet interaction **Corrado Trigilio**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	Characterizing the atmosphere of Proxima b with a space-based mid-infrared nulling interferometer **Denis Defrère**
14:42	Detectability of Earth-like planets in dynamically informed habitable zones: the case of alpha Centauri **Nikolaos Georgakarakos**
14:54	NEAR: new earths in the alpha Cen region (bringing VISIR as a "visiting instrument" to ESO-VLT-UT4) **Ulrich Kaeufl**
15:06	Planet Detectability in the Alpha Centauri System **Lily Zhao**
15:18	Project Blue: Optical Coronagraphic Imaging Search for Terrestrial-class Exoplanets around Alpha Centauri A and B **Franck Marchis**
15:30	The Exo-Life Finder (ELF) Telescope for direct imaging and indirect surface mapping of habitable Earth-like exoplanets and their biosignatures and technosignatures **Svetlana Berdyugina**
15:42	Discussion

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16:00	**COFFEE BREAK**
16:30	The Breakthrough Initiatives: Search for Life in the Universe **S. Pete Worden**
16:50	Deceleration of high-velocity interstellar photon sails at alpha Centauri **René Heller**
17:05	Breakthrough Listen SETI Observations of the Alpha Centauri system **Steve Croft**
17:20	Discussion and Summary
18:00	Close

Hall 1C — SS31 GALAXIES: Unveiling the low surface brightness Universe: the new era of deep-wide surveys

Chair: **Sugata Kaviraj**

09:00	A Review of Intracluster Light in Galaxy Clusters: Potentials, and Potential Pitfalls **Lee Kelvin**
09:30	The Intra-Cluster Light at the Frontier: The Frontier Fields Clusters and Beyond. **Mireia Montes**
09:45	Probing the Low Surface Brightness Peripheries of Galaxies with Resolved Stars **Annette Ferguson**
10:00	The galaxy halo - intra-cluster light dichotomy : the Globular Cluster and Planetary Nebulae perspective **Alessia Longobardi**
10:15	Activity around galaxies as revealed by ultra-deep imaging **Nushkia Chamba**
10:30	**COFFEE BREAK**
11:00	Opening ceremony
11:30	The Cassini mission to Saturn: 13 years of discovery **Emma Bunce**
12:00	Multi-fluid solar chromosphere **Elena Khomenko**
12:30	AAS Russell Lecture Fifty-four Years of Adventures in Infrared Astronomy **Eric Becklin**
13:00	**LUNCH**
14:30	What do we know about ultra-diffuse galaxies? **Javier Román**
15:00	The Dragonfly Nearby Galaxies Survey: probing the low surface brightness universe **Allison Merritt**
15:15	A library of synthetic stellar haloes with the IllustrisTNG simulations: from the Milky Way to the most massive clusters **Annalisa Pillepich**
15:30	Sloshing in its cD halo: MUSE kinematics of the central galaxy NGC 3311 **Magda Arnaboldi**
15:45	The low surface brightness Universe: predictions for future surveys from cosmological simulations **Garreth Martin**

TUESDAY, 3 APRIL

16:00	**COFFEE BREAK**
16:30	Automatic morphological classification in the low surface brightness regime using unsupervised machine learning **Ryan Jackson**
16:45	Automatic Identification of Low Surface Brightness Tidal Features in Galaxies **Mike Walmsley**
17:00	From the Zodiacal light to the UV/optical cosmological background: the low surface brightness sky unveiled. **David Valls-Gabaud**
17:15	A ground-based pathfinder for MESSIER: one step closer to the exploration of the ultra-low surface brightness universe **Simona Lombardo**
17:30	Are Low-Excitation Radio Galaxies Triggered by Minor-Mergers? **Yjan Gordon**
17:45	Measuring disc growth in Milky Way-like galaxies **Cristina Martínez-Lombilla**
18:00	Close

Room 11B — S1 INSTRUMENTATION: Early science with JWST

Chairs: **Gillian Wright, Pierre Ferruit, Pierre-Olivier Lagage**

09:00	The Cosmic Evolution Early Release Science Survey (CEERS) **Stephen Wilkins**
09:25	TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star formation **Justin Spilker**
09:50	The Discovery and Properties of a Newly Discovered Compact Lensing Cluster CLIO at z = 0.42: A unique JWST target **Alex Griffiths**
10:05	GLASS-ERS: a JWST exploration of galaxy formation and evolution behind A2744 **Kasper Schmidt**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	The JWST Early Release Science Program for the Direct Imaging of Extrasolar Planetary Systems **Sasha Hinkley**
14:55	ERS observations of the Jovian System as a demonstration of JWST's capabilities for Solar System science **Imke de Pater**
15:20	IceAge: astrobiology in the JWST era **Melissa Mcclure**
15:45	The Giant Planets of our Solar System from JWST **Leigh Fletcher**
16:00	**COFFEE BREAK**
16:30	Galaxy evolution in the first billion years: plans for early science with JWST/NIRSpec from the Instrument Science Team **Andrew Bunker**
16:45	Spectroscopic High-z MIRI GTO program: overview, simulations and JWST pipeline testing **Javier Álvarez-Márquez**
17:00	The NIRSpec GTO Galaxy Assembly IFS Survey with NIRSpec Instrument Science Team **Santiago Arribas**
17:15	Chasing passive galaxies in the early Universe: a critical analysis in the CANDELS fields, looking forward to JWST **Emiliano Merlin**
17:30	Modeling the ultraviolet emission from young galaxies at high redshift **Alba Vidal Garcia**
17:45	Discussion
18:00	Close

WEDNESDAY, 4 APRIL

Hall 1C — S3 GALAXIES: Galaxy formation through cosmic time: synergising theory and observations in the era of large facilities

Chair: **Pratika Dayal**

09:00	Formation of the First Stars, Galaxies, and Blackholes **Naoki Yoshida**
09:30	The first matter cycle in the Universe: from Pop III stars to Pop II stars **Gen Chiaki**
09:45	Clues on the early phases of galaxy formation revealed by young metal-poor galaxies at cosmic noon **Ricardo Amorin**
10:00	Enlightening the dark ages with GRBs **Susanna Vergani**
10:15	Poster Short Presentation
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Reionization - its sources and imprints **Masami Ouchi**
15:00	Update on the patchiness of reionisation over 5.9<z<6.1 using 92 quasar lines of sight **Sarah Bosman**
15:15	Investigating the connection between Lyman Continuum and Lyα emission and other indirect indicators in high-redshift star forming galaxies **Francesca Marchi**
15:30	Escape of ionizing radiation from high redshift dwarf galaxies: role of massive black holes **Maxime Trebitsch**
15:45	Re-ionisation is solved: All you need is LAEs **David Sobral**
16:00	**COFFEE BREAK**
16:30	The dawn of galaxies **Andrea Ferrara**
17:00	Star Formation Rate in z=8 galaxies with PEGASE.3: Lyman Break Galaxies? **Brigitte Rocca Volmerange**
17:15	Lya emitter clustering with MUSE **Catrina Diener**
17:30	Rotation curves at high redshift: theory and observations **Matthieu Schaller**
17:45	The Galaxy-Halo Connection in SMUVS **William Cowley**
18:00	Close

Hall 1A — S5 STRONG GRAVITY: Relativistic astrophysics

Chair: **Silke Britzen**

09:00	Supersoft Transient X-ray Binaries in the Magellanic Clouds **Philip Charles**
09:15	Extragalactic X-ray binaries **Tana Joseph**
09:30	Particle bombardment onto the atmosphere of strongly magnetized neutron stars **Denis Gonzalez-Caniulef**
09:45	The effect of diffusive nuclear burning on neutron star cooling behaviour **Marcella Wijngaarden**
10:00	GRRMHD simulations of super-Eddington accretion onto a compact star with a hard surface **David Abarca**
10:15	Probing the magnetic field evolution in normal radio pulsars **Anton Biryukov**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Observing Black Hole Environments through Reverberation mapping **Christopher Reynolds**
15:00	A new relativistic reflection model and its application to NGC 4151 and Cyg X-1 **Andrzej Niedzwiecki**
15:15	Signatures of chaotic motion and particle acceleration near magnetised black holes **Vladimir Karas**
15:30	Imaging Black Holes **Heino Falcke**
16:00	**COFFEE BREAK**
16:30	Equilibrium of charged perfect fluid around a Kerr black hole **Audrey Trova**
16:45	Global radio versus bolometric X-ray flux correlation for the black hole X-ray binary GX 339-4 **Nazma Islam**
17:00	Radiatively driven relativistic jets in curved spacetime **Mukesh Vyas**
17:15	Relativistic jets and their connection with the central black hole **Christophe Sauty**
17:30	Neutron Star's Magnetic Field: Beyond Dipole **Konstantinos Gourgoulatios**
17:45	Cherenkov Telescope Array - A Sensitive Probe of the Extreme Universe **Elina Lindfors**
18:00	Close

WEDNESDAY, 4 APRIL

Room 11A — S6 SOFTWARE: Software in astronomy

Chairs: **Amruta Jaodand, Alice Allen, Rein Warmels**

09:00	The role of RSE in research software development **Mike Croucher**
09:20	Research Software Engineering - the DiRAC facility experience **Mark Wilkinson**
09:30	Research programming, a skill left behind **David Pérez-Suárez**
09:40	Test-driven Development in Astronomy **James Nightingale**
09:50	Sustaining The Montage Image Mosaic Engine Since 2002 **Bruce Berriman**
10:10	A walk through Python ecosystem **Amruta Jaodand**
10:20	The Astropy Project: A community Python library and ecosystem of astronomy packages **Brigitta Sipocz**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Understanding the Impact of Your Research Software **Federica Bianco**
14:50	Citation and sharing of data and software in astronomy – a journal editor's perspective **Keith Smith**
15:10	Receiving Credit for Research Software **Alice Allen**
15:20	Discussion **Rein Warmels**
16:00	**COFFEE BREAK**
16:30	MADCUBA and SLIM: A lightweight software package for datacube handling and spectral line analysis **Sergio Martin**
16:40	SunPy the Open Source Solar Physics Library **Alex Hamilton**
16:50	Stingray, HENDRICS and Dave: Spectral Timing for all **Matteo Bachetti**
17:00	Developing and applying astronomical software for novel use in conservation biology **Maisie Rashman**
17:10	xrayvision - a collection of image reconstructions methods for X-ray visibility observations **Shane Maloney**
17:20	Crowded-field 3D spectroscopy with PampelMuse **Sebastian Kamann**
17:30	The next-generation cosmological code SWIFT **Matthieu Schaller**
18:00	Close

Room 12 — S7 TRANSIENTS: Supernova diversity: prospects and challenges for next-generation surveys

Chair: **Maria Teresa Botticella**

09:00	Observational properties of interacting Supernovae **Francesco Taddia**
09:20	Observational evidence of a common progenitor system for supernovae Ia-CSM **Regis Cartier**
09:32	Mass loss from stripped envelope supernovae progenitors **Jorick Vink**
09:44	Stripped envelope SNe from PTF and iPTF **Cristina Barbarino**
09:56	Modelling pre-SN mass loss **Jose Groh**
10:16	A population of extremely energetic nuclear transients **Erkki Kankare**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Nuclear transients from OGLE and Gaia surveys **Mariusz Gromadzki**
14:42	Observational evidences of pre-SN outbursts **Nancy Elias-Rosa**
15:02	The unique pre-explosion spectrum of SN 2015bh: constraints on the progenitor nature **Ioana Boian**
15:14	New SN types and prospective changes in the traditional SN classification scheme **Stefan Taubenberger**
15:34	Machine Learning for Supernova Classification **Emille Ishida**
16:00	**COFFEE BREAK**
16:30	Photometric supernova classification with Bayesian interpretation using only photometry **Anais Möller**
16:54	LSST SN survey **Federica Bianco**
17:14	All the sky, all the time: ASAS-SN **David Bersier**
17:26	SHIZUCA: Subaru HIgh-Z sUpernova CAmpaign **Takashi Moriya**
17:38	The Zwicky Transient Facility Public Supernova Surveys **Daniel Perley**
18:00	Close

WEDNESDAY, 4 APRIL

Hall 1B — S9 STAR FORMATION: The interstellar medium as a window onto galaxy evolution

Chair: **Christopher Clark**

09:00	A close-up look on HII region metallicities in dwarf galaxies **Katarzyna Bensch**
09:15	WISDOM - Giant Molecular Clouds in the Early Type Galaxies **Lijie Liu**
09:30	The nature and prevalence of cold gas outflows across the local SFR-M* **Guido Roberts-Borsani**
09:45	A Direct Comparison between Molecular and Ionised Outflows in Local Galaxies **Andrin Flütsch**
10:00	DustPedia: Evolution in the dust-to-metal ratio provides evidence for dust grain growth **Pieter De Vis**
10:15	Dust scaling relations as a probe of dust formation and evolution processes **Ilse De Looze**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Cold outflows ruffling galaxy environments **Claudia Cicone**
14:50	ALMA reveals metals yet no dust within multiple components in a luminous galaxy at z~7 **Jorryt Matthee**
15:05	Interstellar dust formation and destruction: the role of turbulence and hydrodynamic drag **Lars Mattsson**
15:20	The Benchmark Local Dust Mass Function of the GAMA/H-ATLAS Overlap **Rosie Beeston**
15:35	Chemical evolution of gas and dust in high redshift galaxies **Carlos De Breuck**

16:00	**COFFEE BREAK**
16:30	Damped Lyman-alpha systems : a blind cosmological probe of the gas in and around galaxies **Pasquier Noterdaeme**
16:50	Resolving the ISM at the peak of cosmic star formation with ALMA -- Sub-arcsec CO maps of z~2-3 sub-millimeter galaxies **Gabriela Calistro Rivera**
17:05	Spatially resolved gas excitation properties and chemical abundances in high redshift galaxies: insights from the KLEVER Survey **Mirko Curti**
17:20	The evolution of ISM metallicity using direct methods from z ~ 3.5 to the present day **Rob Yates**
17:35	Breathing in and out: the cycle of gas in galaxies **Antonino Marasco**
18:00	Close

WEDNESDAY, 4 APRIL

Room 11C — S10 PLANETS: The physics and chemistry of planetary atmospheres

Chair: **Christiane Helling**

09:00	Observing exoplanet atmospheres **Ignas Snellen**
09:25	A chemical survey of exoplanets **Giovanna Tinetti**
09:40	Atmosphere retrieval using Neural Networks and physical/chemical models **Michiel Min**
10:05	Building complexity in cloud models for spectral retrieval: observing cloudy planets with the ARIEL mission **Joanna Barstow**
10:20	Unveiling exoplanet atmospheres with the ACCESS survey **Néstor Espinoza**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Prospects for the detection of biosignatures on exoplanets **Heike Rauer**
14:55	On the atmospheric properties of the hottest giant exoplanets **Jacob Arcangeli**
15:10	Clouds as an opacity source **Wakeford R. Hannah**
15:35	Cloud formation modelling in exoplanetary atmospheres **Christiane Helling**
16:00	**COFFEE BREAK**
16:30	Cloud modelling for brown dwarfs and young giant exoplanets **Benjamin Charnay**
16:45	Modelling equilibrium chemistry **Peter Woitke**
17:10	Modelling kinetic gas-chemistry **Olivia Venot**
17:35	Simulation of Exoplanetary Atmospheres to Improve Automated Selection of Planets for Ground-Based Follow up **Hayes J. Joshua**
17:50	Atmospheric Library of Far Away Worlds **Jayesh Goyal**
18:00	Close

Room 14 — SS2 OUTREACH: Art space: using artistic media for outreach and science communication in astronomy, Solar physics and space science

Chair: **Helen Mason**

09:00	The Human Spaceship: With the new 21st century technological advancements in space exploration and science of the cosmos, which are dramatically changing humanity's understanding of its place in the Universe, can scientists continue to work in specialist fields without inviting other disciplines, such as the arts, to help communicate to larger and more diverse audiences? **Helen Schell**
09:25	Cosmos: The Infographic Book of Space **Chris North**
09:40	Astrojots - Explaining space & its exploration with cartoons **Jones H. Geraint**
09:55	Creating a Soniverse: the sound of light? **Andrew Newsam**
10:10	Dataesthetic harmony: making engaging music from science. Exploring ways to convey complex concepts (without losing the audience). **Luke Moore**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Our Place In Space: an art & science exhibit to educate, inform & inspire **Antonella Nota**
14:55	"Art of the Cosmos" – A Major Multimedia Art Show Inspired by Images from the Hubble Space Telescope **Kenneth Carpenter**
15:10	Creativity and Curiosity: A collaboration between Artists and Astronomers **Ione Parkin**
15:25	Cycle The Solar System and other science-inspired art by Nick Sayers **Nick Sayers**
15:40	Astrarte on the Island **Emilio Molinari**
16:00	**COFFEE BREAK**
16:30	Culture with C for Cosmos (Cultura con C de Cosmos) **Montserrat Villar Martin**
16:45	Skyscape Experiences: Contemporary Artistic Exploration of Astronomy within Stellarium **Deborah Harty**
17:00	Embodied Astronomical Phenomenon: Using Art to Access Astronomy **Byron Rich**
17:15	Art Space: Panel Discussion **Marek Kukula**
18:00	Close

WEDNESDAY, 4 APRIL

Room 13 — SS5 MILKY WAY: Complex organic molecules in the Universe: current understanding and perspectives

Chair: **Izaskun Jimenez-serra**

09:00	The cometary zoo of organics **Kathrin Altwegg**
09:20	Molecular complexity in solar-like star forming regions **Cecilia Ceccarelli**
09:40	COM observations: chemical inventory in galaxies **Rebeca Aladro**
10:00	The Protostellar Interferometric Line Survey: Complex organic molecules on Solar System scales **Hannah Calcutt**
10:10	Protostellar shocks as factories of interstellar complex organic molecules: the ASAI & SOLIS synergy **Claudio Codella**
10:20	Complex organic molecules in strongly UV-irradiated gas **Sara Cuadrado**
10:25	Complex Organic Molecules in the Galactic Centre: The Nitrogen Family **Shaoshan Zeng**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Chemical Modelling of Complex Organic Molecules in Prestellar Cores: Limitations and Improvements **Anton Vasyunin**
14:50	Complex Organic Molecules chemical modelling in star-forming regions: limitations and improvements **David Quénard**
15:10	COM chemical modelling in protoplanetary disks: limitations and improvements **Catherine Walsh**
15:30	A Radical Route for the Formation of interstellar COMs **Jonathan Holdship**
15:40	The chemical evolution of the youngest planet forming discs **John Ilee**
15:50	Understanding the effects of clumping and porosity on the growth of carbon chains in the stellar outflow of the carbon-rich AGB star IRC+10216 **Marie Van de Sande**

16:00	**COFFEE BREAK**
16:30	Gas-phase formation routes of interstellar complex organic molecules **Nadia Balucani**
16:50	Complex organic molecule formation under dark cloud conditions: The laboratory view **Harold Linnartz**
17:10	From Astrochemistry to Astrobiology: the role of extraterrestrial ices in the build-up of organics from comets and asteroids to prebiotic chemistry **Louis d'Hendecourt**
17:30	Laboratory studies of the kinetics of COMs at very low temperatures **Dwayne Heard**
17:40	The role of 1keV electrons on the formation of simple and complex molecules **Sergio Ioppolo**
17:50	Ices as a source of complex organic molecules in gas and solid phases of interplanetary Solar System objects **Gregoire Danger**
18:00	Close

WEDNESDAY, 4 APRIL

Room 5

SS11 INSTRUMENTATION: Exploring the Universe: a European vision for the future of VLBI

Chair: **Tiziana Venturi**

09:00	Gravitational waves: potential contribution of VLBI **Andrew Williamson**
09:30	Gravitational Lensing with the next generation of VLBI arrays **Cristiana Spingola**
09:45	Coevolution of Supermassive Black Holes and their host galaxies: open questions and prospects for VLBI **Andrea Merloni**
10:15	The Impact of VLBI Observations on our Understanding of Star-formation Activity and Low-Luminosity AGN Systems **Tom Muxlow**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Imaging black holes with mm-VLBI: past, present and future **Heino Falcke**
15:00	Big and young SMBHs in the early Universe: how can we observe jetted AGN? **Tullia Sbarrato**
15:15	Zooming in on fast radio bursts **Jason Hessels**
15:45	Extragalactic Synchrotron Transients with VLBI: from Supernovae to TDEs **Miguel Perez Torres**
16:00	**COFFEE BREAK**
16:30	Stellar masers and the structure of the Galaxy **Andreas Brunthaler**
17:00	VLBI and the life-cycles of stars **Hans Olofsson**
17:15	The Future of VLBI **John Conway**
17:45	Summary and concluding remarks **Tiziana Venturi**
18:00	Close

Room 4B	SS19 STARS: Multiple populations in massive star clusters – a common thread through cosmological ages? Chair: **William Chantereau**
09:00	A theoretical view on the complexities of stellar populations in star clusters **Maurizio Salaris**
09:30	Multiple stellar populations in globular clusters - A critical review of the observational constraints from the nucleosynthesis point of view **Corinne Charbonnel**
09:45	Star cluster formation and evolution **Angela Adamo**
10:15	Is the first population in globular clusters chemically homogeneous? **Ivan Cabrera-Ziri**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	Age as a Major Factor in the Onset of Multiple Populations in Stellar Clusters **Silvia Martocchia**
14:40	The effect of age on the onset of multiple populations: further constraints from intermediate age massive clusters in the LMC with FORS2 **Katherine Hollyhead**
14:50	The Globular Cluster Populations of Local Group Galaxies **Annette Ferguson**
15:20	Studying the kinematics of individual stellar populations with MUSE **Sebastian Kamann**
15:30	Population-dependent metallicities in globular clusters with MUSE **Tim-Oliver Husser**
15:40	Binaries in multiple populations of Galactic globular clusters **Benjamin Giesers**
16:00	**COFFEE BREAK**
16:30	Signatures of multiple populations in integrated-light observations of globular clusters **Søren Larsen**
16:45	Assessing the reliability of simple stellar population models to interpret observations of star clusters in the ultraviolet **Alba Vidal Garcia**
17:00	Environmental dependence of the properties of young massive clusters in M51. **Matteo Messa**
17:15	Multiple stellar populations in ultra-compact dwarf galaxies? **Michael Hilker**
17:30	Concurrent formation of super-massive stars and globular clusters: self-enrichment in one starburst **Mark Gieles**
17:45	Evolution of star clusters in cosmological simulations: the role of the galactic environment **Luis Martinez**
18:00	Close

WEDNESDAY, 4 APRIL

Room 4A	SS28 SOLAR PHYSICS: The causes and consequences of space weather Chair: **Rachel Howe**
09:00	Origins of Space Weather on the Sun **Duncan Mackay**
09:20	Helioseismology and the evolution of the Sun's internal magnetic field through multiple solar activity cycles **Anne-Marie Broomhall**
09:35	Predicting the Longitudinal Position of Solar Eruptions **Norbert Gyenge**
09:50	Ensemble flare forecasting: using numerical weather prediction techniques to improve space weather operations **Sophie Murray A.**
10:05	Identifying Coronal Holes and their Impacts on Space Weather Phenomena **Tadhg M. Garton**
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	On the importance of heliospheric observations and measurements for space weather forecasting **Mike Marsh**
14:50	Future Diagnostics of Coronal Mass Ejections with VL and UV Coronagraphic data **Paolo Pagano**
15:04	Insights into Coronal Mass Ejection Shocks with the Irish Low Frequency Array (I-LOFAR) **Peter Gallagher**
15:18	SMILE: A Novel and Global Way to Explore Solar-Terrestrial Relationships **Jonathan Rae**
15:32	A New Model for CME Arrival Time Prediction Using Machine Learning Methods: CAT-PUMA **Jiajia Liu**
15:46	Turbulence-driven Kinetic Instabilities and Their Effects on Particle Scattering in the Solar Wind **Daniel Verscharen**

16:00	**COFFEE BREAK**
16:30	How does the magnetosphere-ionosphere system condition the impact of space weather? **Mervyn Freeman**
16:50	Chaos in a Toy Model of Planetary Magnetotail Dynamics **Robert Burston**
17:04	Four-Spacecraft Magnetic Curvature and Vorticity Analyses on Kelvin-Helmholtz Waves: MHD Simulations and Observations **Rungployphan Kieokaew**
17:18	Pulsations in the Earth's Lower Ionosphere Synchronized With Solar Flare X-ray Emission **Laura Hayes A.**
17:32	School students' space weather research **Peter Hatfield**
17:46	What does a geomagnetic storm sound like? Results from Sonification and Citizen Science of Magnetospheric ULF Waves **Martin Archer**
18:00	Close

WEDNESDAY, 4 APRIL

Room 6	SS30 INSTRUMENTATION: Toward the next Generation of integral field spectrographs: ideas, designs and developments Chairs: **Robert Harris, Chris Evans, Ariadna Calcines-Rosario**
09:00	Unveiling resolved galaxy kinematics with integral field spectroscopy from z~0-3 **Emily Wisnioski**
09:20	MUSE: deep fields and beyond **Johan Richard**
09:40	Solar spectroscopy from space - the case for integral field spectrographs **Sarah Matthews**
09:55	All You Need Is ... IFS **Andreas Kelz**
10:10	Extragalactic Science Results with integral field spectrographs: GMOS and MUSE **Nimisha Kumari**
10:25	Poster short Presentation
10:30	**COFFEE BREAK**
11:00	MERAC Prize in Theoretical Astrophysics **Sandrine Codis**
11:30	MERAC Prize in Observational Astrophysics **Renske Smit**
12:00	MERAC Prize in New Technologies **Martin Pertenais**
12:30	Cosmological hydrodynamical simulations **Joop Schaye**
13:00	**LUNCH**
14:30	ELT HIRES: an optical-NIR high resolution spectrograph with integral field capabilities **Alessandro Marconi**
14:50	HARMONI – the ELT first light spectrograph **Matthias Tecza**
15:10	First-light observations of an image-slicer for Solar Physics. **Carlos Dominguez-Tagle**
15:30	MEGARA, the new high-throughput R=6000-20000 IFU and MOS for the GTC **Armando Gil de Paz**
15:45	Poster Short presentation
16:00	**COFFEE BREAK**
16:30	Development of Field Integral Spectroscopy for High-Resolution Solar Observations **Yoshinori Suematsu**
16:50	Astrophotonics - the application of photonic technologies to astronomical instrumentation **Robert Thomson**
17:10	Improving astrophotonc spatial reformatters with on sky simulated performance **Theodoros Anagnos**
17:25	Photonic approaches to modal-noise mitigation in fibre-fed spectrographs **Fraser Pike**
17:40	IFU data and the M/L of Globular Clusters **Hannah Dalgleish**
17:55	Final points
18:00	Close

Hall 1B — S2 MILKY WAY: Gaia: The billion-star galaxy census: at the threshold of Gaia data release 2

Chair: **Anthony Brown**

09:00	Measuring the Solar motion with Gaia-TGAS and RAVE **Jason Hunt**
09:15	Putting Gaia on the evolutionary map: generating a Hertzsprung-Russell diagram for Gaia DR1 and beyond **Iain McDonald**
09:30	Stellar Distances and Kinematics from Gaia **Ralph Schoenrich**
09:45	Kinematics of the Galactic Halo in Gaia DR1 **Alis Deason**
10:00	The empirical Gaia G-band extinction coefficient **Camilla Danielski**
10:15	A complete census of the stellar population in the solar neighbourhood **Boris Gaensicke**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Gaia Data Release 2: almost there! **Anthony Brown**
15:00	A preview of the Gaia sky in colour in Data Release 2 **Francesca De Angeli**
15:15	Gaia SSO: astrometry and dynamics of Solar System Objects **Daniel Hestroffer**
15:30	Gaia DR2 radial velocities **David Katz**
15:45	The Gaia Archive. Status and evolution for Data Release 2+ **Alcione Mora**
16:00	**COFFEE BREAK**
16:30	Gaia mission status **Timo Prusti**
16:45	The Gaia Radial Velocity Spectrometer **Mark Cropper**
17:00	Gaia-GREAT: News and status **Nicholas Walton**
17:15	Photometric microlensing with Gaia **Katarzyna Kruszynska**
17:30	Open clusters from Gaia **Antonella Vallenari**
17:45	The Hyades as seen by Gaia **Jos De Bruijne**
18:00	Close

THURSDAY, 5 APRIL

Hall 1C — S3 GALAXIES: Galaxy formation through cosmic time: synergising theory and observations in the era of large facilities

Chair: **Pratika Dayal**

09:00	Probing the dust enrichment of the Universe in the ALMA-era **Darach Watson**
09:30	A search for ultrabright high-z submillimeter lensed galaxies **Susana Iglesias-Groth**
09:45	Fueling and quenching star formation in galaxies: from the filaments to the cluster cores. **Pascale Jablonka**
10:00	Kiloparsec-scale [CII] gaseous clumps and star formation at z=5-7 **Stefano Carniani**
10:15	Lya emission in the AzTEC-3 porto-cluster field **Lucia Guaita**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Evolution of mass-metallicity relations through cosmic time **Leslie Hunt**
15:00	The evolution of the mass-metallicity relation using direct methods from z~3.5 to the present day **Rob Yates**
15:15	Metal enrichment and metallicity gradients in evolving galaxies: the differential role of energetic phenomena **Michaela Hirschmann**
15:30	Extragalactic Archaeology with Cosmological Hydrodynamical Simulations **Fiorenzo Vincenzo**
15:45	Tracing the mass-metallicity relation of star-forming galaxies at high redshifts using GRB-selected galaxies **Maryam Arabsalmani**
16:00	**COFFEE BREAK**
16:30	Galaxies in the Epoch of Reionization - Current Status and Future Prospects with JWST **Andrew Bunker**
17:00	A synergy between HST, Spitzer, the VLT and ALMA to explore the Epoch of Reionisation **Nicolas Laporte**
17:15	Learning about star formation quenching with emission line galaxies **Violeta Gonzalez-Perez**
17:30	Spatially resolved star-formation histories and the connection to galaxy physical properties **Kate Rowlands**
17:45	S3 Poster Short Presentation
18:00	Close

Room 4A — S4 SOLAR PHYSICS: High resolution solar physics – the dawn of a new era

Chairs: **Hector Socas-Navarro, Sarah Matthews**

09:00	Simulating the "seasons" in space weather **Mausumi Dikpati**
09:25	Expansion of the double dynamo model to the past ten plus millennia **Valentina Zharkova**
09:38	Measuring global magnetic helicity spectrum on the solar surface - implications for the solar dynamo **Nishant Kumar Singh**
09:51	Recent progress in our understanding of sunspot dynamics and magnetism. **Göran Scharmer**
10:04	The Jurcak criterion: The magnetic property of the umbral boundary in sunspots **Rolf Schlichenmaier**
10:17	Quiet-sun magnetic flux removal **Catherine Elisabeth Fischer**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Status of the Daniel K. Inouye Solar Telescope **Thomas Rimmele**
14:55	Spectropolarimetric properties of solar magnetic bright points at high resolution. **Peter Keys**
15:08	The umbral filament in the leading spot of AR NOAA 12529 **Salvo Guglielmino**
15:21	The effect of small-scale photosperic magnetic fields on Fe I 6301 and 6302 line profiles **Mykola Gordovskyy**
15:34	Automated Technique for the Analysis of Sunspot Rotation **Richard Grimes**
15:47	S4 Poster Short Presentation
16:00	**COFFEE BREAK**
16:30	Chromospheric dynamics and magnetism **Mats Carlsson**
16:55	High resolution solar photosphere/chromosphere tomography **Arnold Hanslmeier**
17:08	Fibrillar Structures in the Solar Chromosphere **Shahin Jafarzadeh**
17:21	Does ALMA help state-of-the-art inversions of the solar atmosphere? **João Manuel Da Silva Santos**
17:34	Millimetre Continuum Diagnostics of the Solar Atmosphere with ALMA **Andrew Rodger**
18:00	Close

THURSDAY, 5 APRIL

Room 11A — S6 SOFTWARE: Software in astronomy

Chairs: **Rein Warmels, Andy Pollock, Stephen Serjeant**

09:00	Open Science in Astronomy **Rachael Ainsworth**
09:10	ESASky version 2: the next generation **Debbie Baines**
09:20	Astronomy in a Big Data platform **Jorge Palacios**
09:30	An Interactive Sky Map based on the Byurakan Plate Archive **Gor Mikayelyan**
09:40	The ASI Cosmic Ray Database for charged particles data **Valeria Di Felice**
09:50	Using XML and semantic technologies in astroinformatics to manage data **Guy Beech**
10:00	Discussion **Andy Pollock**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Deep learning to study the noise in gravitational wave interferometers **Massimiliano Razzano**
14:45	Selection of Spitzer YSO candidates using deep learning classifier **David Cornu**
15:00	Data science for direct imaging of exoplanets. Machine learning applied to astronomical high-contrast imaging **Carlos Alberto Gomez Gonzalez**
15:15	k-means clustering in galaxy feature data **Sebastian Turner**
15:30	Spatial inference of astronomical datasets with INLA **Emille Ishida**
15:45	Imbalanced Learning In Astronomy **Robert Lyon**
16:00	**COFFEE BREAK**
16:30	Journal software policies
16:45	Ratings for numerical reproducibility
17:05	Improving instructions for authors and referees
17:25	Additional agenda items/Discussion
17:50	Summary and Wrap-up
18:00	Close

THURSDAY, 5 APRIL

Hall 1A — S8 STAR FORMATION: The formation of stars and planets

Chair: **Derek Ward-thompson**

	Star and planet formation: clouds and cores
09:00	Dust property variations and the concentration of mass in IRDCs: a NIKA view **Andrew Rigby**
09:15	Searching for oxygen in the dense ISM with SOFIA: the SOFOCLES project **Claudia Comito**
09:30	Formation of Binary Stars: Nature of Core Fragmentation and Driving of Circumbinary Inflow **Jeremy Lim**
09:45	Galactic Cold Cores: What can we learn about cores and filaments from an unbiased sample of Planck clumps ? **Julien Montillaud**
10:00	Statistical properties of the molecular filaments in Orion B **Jan Orkisz**
10:15	Subsonic gas motions in a high-mass star-forming IRDC **Vlas Sokolov**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
	Star and planet formation: proto-stars
14:30	Chemical Tracers in Proto-Brown Dwarfs – Observations and Modelling **Basmah Riaz**
14:45	Uncovering the evolution of high-mass protostars with ALMA **Adam Avison**
15:00	ALMA survey of astrochemical species around High mass protostars **Naomi Asabre Frimpong**
15:15	Feedback from deeply-embedded protostars: the Herschel legacy **Agata Karska**
15:30	A search for non-thermal radio emission from massive young stellar objects (MYSOs) **Willice Obonyo**
15:45	VLTI Imaging of a High-Mass Protobinary System: Unveiling the Dynamical Processes in High-Mass Star Formation **Stefan Kraus**
16:00	**COFFEE BREAK**
	Star and planet formation: massive star formation
16:30	Massive Star Cluster Formation - Lessons from the Galaxy **Jonathan Tan**
16:45	Star formation in the Galactic Centre **Steven Longmore**
17:00	Star-forming content of the giant molecular filaments in the Milky Way **Miaomiao Zhang**
17:15	Star Formation in the Inner Galaxy **David Eden**
17:30	The CHIMPS surveys and star formation in the Galactic Plane **Toby Moore**
17:45	Seeding the Galactic Centre gas stream: initial conditions for the formation of Young Massive Clusters **Jonathan Henshaw**
18:00	Close

Room 11C — S10 PLANETS: The physics and chemistry of planetary atmospheres

Chair: **Christiane Helling**

09:00	Cloud modelling in Earth GCMs **Ian Boutle**
09:25	Coupled surface outgassing and mineral cloud formation on hot super-Earth lava planets: A 55 Cancri e case study **Graham Lee**
09:35	Long-chain Carbon Chemical Scheme Application for the Consistent Modelling of Photochemical Haze **Sarah Blumenthal**
09:45	3D global circulation on Exo-Earths (Invited talk) **Ludmila Carone**
10:10	The stability of exoplanetary atmospheres in the habitable zones of very low-mass stars **Katja Poppenhaeger**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	An idealized dynamical model of terrestrial atmospheres at low planetary rotation rates: from Earth towards Venus **Geoffrey Vallis**
14:45	Constructing and exploring a dimensionless parameter space for the atmospheric dynamics of terrestrial planets and moons **Peter Read**
15:00	The physics and chemistry of stellar atmospheres **Martin Asplund**
15:30	3D Global Circulation Modeling for Giant Gas Planets **Ian Dobbs-Dixon**
16:00	**COFFEE BREAK**
16:30	Exo-Nephology: 3D simulations of cloudy hot-Jupiter atmospheres with the Met Office 'Unified Model'. **Stefan Lines**
16:45	Observable signatures of wind-driven chemistry with a fully consistent three dimensional radiative hydrodynamics model of HD 209458b **Benjamin Drummond**
17:00	Studying the spin-up of superrotation in hot Jupiters **Florian Debras**
17:15	Towards consistent modelling of planetary atmospheres with THOR **Joao Mendonca**
17:30	Moist General Circulation Models of Jupiter's atmosphere **Stephen Thomson**
17:45	Poster Short Presentation
18:00	Close

THURSDAY, 5 APRIL

Room 11B — S11 COSMOLOGY: Weak and strong-lensing techniques to unveil mysteries of the Universe

Chair: **Mathilde Jauzac**

09:00	Strong lensing magnification in clusters to study the Lyman-alpha Universe **Johan Richard**
09:30	Physical properties of low mass MUSE-confirmed galaxies at z>3 in the Frontier Fields **Johany Martinez**
09:45	Exploiting the power of gravitational lensing to probe galaxy evolution with galaxy stellar mass functions **Rachana Bhatawdekar**
10:00	Strong lensing modelling of RELICS clusters **Acebron Ana**
10:15	RELICS: The mass distribution of 41 Strong Lensing Clusters **Guillaume Mahler**
10:30	Poster Short Presentation
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Dissecting a Giant Lyman-Alpha Arc in MACSJ1206.2-0847 **David Lagattuta**
14:45	A magnified view of galaxy evolution in the first billion years **Rachael Livermore**
15:15	The VLT and ALMA probe a highly magnified object deep into the Epoch of Reionisation **Nicolas Laporte**
15:30	A close galaxy merger of an hyperluminous submm galaxy and a very luminous Lyman break galaxy revealed by gravitational lensing **Rui Marques Chaves**
15:45	Lensed Hyper-luminous SMGs Selected by Planck **Patrick Kamieneski**
16:00	**COFFEE BREAK**
16:30	X-ray - lensing comparisons: what have we learned, and where to go? **Dominique Eckert**
16:45	Large-scale filament detections with Gravitational Lensing **Sut Ieng Tam**
17:00	A model-independent approach to gravitational lensing **Jenny Wagner**
17:15	Cosmology with Gravitational Lens Time Delays **Sherry Suyu**
17:45	A weak lensing measurement of the external convergence in the field of the lensed quasar HE 0435-1223 **Olga Tihhonova**
18:00	Close

Room 12 — SS3 STRONG GRAVITY: Astrophysical jets in the era of multi-messenger astronomy

Chair: **Serguei Komissarov**

09:00	Particle Acceleration in Relativistic Astrophysical Jets **Lorenzo Sironi**
09:30	Modeling the central engine of relativistic spine jets of AGN and GRBs **Christophe Sauty**
09:45	OJ287: Deciphering the "Rosetta stone of blazars" **Silke Britzen**
10:00	Reconfinement and Loss of Stability of AGN Jets **Konstantinos Gourgouliatos**
10:15	Kinetic power of quasars from MOJAVE superluminal motions **Martín López-Corredoira**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Gamma-rays from Galactic & Extragalactic jets: status & challenges **Vaidehi Sharan Paliya**
14:55	Gamma rays from Cygnus X-1 and Cygnus X-3 **Alba Fernández-Barral**
15:08	Scale invariant jets: from blazars to microquasars **Ioannis Liodakis**
15:21	Probing high-energy acceleration processes in S5 0716+714 using combined Fermi-LAT and MAGIC observations **Elina Lindfors**
15:34	Shocks in AGN jets: An improving scheme from radio to high energy emission **Olivier Hervet**
15:47	Extending the 'Energetic Scaling of Relativistic Jets from Black Hole Systems' to Include γ-ray loud X-ray binaries **Gavin Lamb**
16:00	**COFFEE BREAK**
16:30	Multi-messenger view (neutrinos, CRs, GWs) of jets: status & prospects **Anna Franckowiak**
17:08	The formation of the central engine of long GRBs **Miguel-Ángel Aloy**
17:21	Off-axis short GRBs from structured jets as counterparts to GW events **Adithan Kathirgamaraju**
17:34	The X-ray / radio counterpart to GW170817 **Hendrik Van Eerten**
17:47	THESEUS: a future key mission for multi-messenger astrophysics **Lorenzo Amati**
18:00	Close

THURSDAY, 5 APRIL

Room 14 — SS6 MILKY WAY: Dust formation by evolved stars and supernovae

Chairs: **Ilse De Looze, Olivia Jones, Elvire De Beck**

09:00	Dust and molecule formation in evolved stars and supernova progenitors **Jacco Van Loon**
09:23	Dust in the close-in environments of the red supergiant Betelgeuse and the AGB star L2 Puppis **Pierre Kervella**
09:35	Gaseous metal oxides and hydroxides tracing the formation of extra-terrestrial dust grains **Marie Van de Sande**
09:47	The submm properties of dust in the detached shells around carbon AGB stars **Matthias Maercker**
09:59	The metallicity dependence of wind speed and mass loss from red supergiants and asymptotic giant branch stars **Steve Goldman**
10:11	Carbon stars in the Small Magellanic Cloud: colors, properties and dust production rate **Ambra Nanni**
10:23	Poster Short Presentation
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Dust formation and winds of AGB stars **Sara Bladh**
14:53	How turbulence complicates the 3-dimensional theory of dust-driven stellar winds **Lars Mattsson**
15:05	Self-consistent hydrochemical modelling: a base for dust formation in AGB winds **Jels Boulangier**
15:17	Observations of dust and molecules in supernovae **Mike Barlow**
15:40	When does dust form in supernova remnants? **Roger Wesson**
15:52	Poster Short Presentation

16:00	**COFFEE BREAK**
16:30	SOFIA observations of the circumstellar ring in Supernova 1987A – dust formation in the post-shocked region? **Mikako Matsuura**
16:42	Gamma-Ray Bursts as probes of dust production at redshift z > 4 **Jan Bolmer**
16:54	Formation and survival of dust in supernova ejecta and remnants **Arkaprabha Sarangi**
17:17	Grain-grain collisions as dust destruction process in supernova reverse shocks **Florian Kirchschlager**
17:29	The earliest galaxies: chaotic and dusty **Pratika Dayal**
17:41	Dust mass and dust-based scaling relations in Local Galaxies: is the dust produced by stars enough? **Michele Ginolfi**
17:53	Poster Short Presentation
18:00	Close

THURSDAY, 5 APRIL

Room 4B	SS7 DIVERSITY: Equity and diversity in astronomy Chair: **Helen Jermak**
09:00	Unconscious bias in academia - what it is and what to do about it **Katja Poppenhaeger**
09:45	Panel discussion
	Media and Entertainment Techniques for Breaking up Science Woman Stereotypes **Sona Farmanyan**
	Overcoming the barriers which can exclude girls and black, Asian and other minority ethnic students from STEM **Kate Hollinshead**
	The strive for gender fair language: the case of the National Institute of Astrophysics in Italy **Marina Orio**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Racial diversity in Astronomy **Nana Ama Browne Klutse**
15:00	Written In Our Southern Stars? Gender in Australian Astronomy **Sarah Brough**
15:20	The RAS Demographic Survey: understanding the UK workforce in astronomy and space science **Robert Massey**
15:40	Dire Straights: The Trials and Tribulations of LGBT Scientists **Ashley Spindler**
16:00	**COFFEE BREAK**
16:30	Neurodiversity, Society and Science **Robert Burston**
16:50	You can't have ADHD - you have a PhD! **Victoria Scowcroft**
17:10	How I Learned to Stop Worrying and Love my PhD **Kate Furnell**
17:30	The Tactile Universe **Nicolas Bonne**
17:50	Concluding remark
18:00	Close

This special session has been sponsored by Nature and Nature Astronomy.

Room 5 — SS9 OUTREACH: European forum of astronomical communities

Chair: **Jan Palous**

10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:45	ASTRONET: situation and prospective **Ronald Stark**
15:00	Bridging the gap: actions to advance the CEE countries in astronomy **Agata Karska**
15:15	IAU South West and Central Asian ROAD and European Eastern partnership in astronomy: collaboration in research, education and public outreach **Areg Mickaelian**
15:25	Scientific opportunities enabled the VLT Interferometer **Alexander Kreplin**
15:35	Water maser survey in the Toruń Centre for Astronomy - first results and future plans **Rafał Sarniak**
15:45	Final discussion
16:00	**COFFEE BREAK**

This special session has been supported financially by the UK Science and Technology Facilities Council.

THURSDAY, 5 APRIL

Room 13 — SS14 TRANSIENTS: Gamma-ray bursts, hypernovae, and superluminous supernovae: energetic cosmic explosions 20 years after SN 1998bw

Chair: **Maria Grazia Bernardini**

09:00	Observations of stripped-envelope core-collapse supernovae **Elena Pian**
09:20	Gamma-ray bursts diversity vs. supernovae homogeneity **Andrea Melandri**
09:32	SN 2016coi and the role of helium in broad-line Ic supernovae **Giacomo Terreran**
09:44	The X-shooter sample of GRB afterglows (XSGRB) **Jonatan Selsing**
09:56	Nebular models for SN 1998bw - and the link to superluminous SNe **Anders Jerkstrand**
10:08	The Spectroscopic Connection between SN-GRBs and Superluminous SNe Ic **Federica Bianco**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Observational properties of superluminous supernovae **Matt Nicholl**
14:50	Type Ib/c Supernovae and Gamma-ray Bursts **Paolo Mazzali**
15:10	Numerical simulations of super-luminous SNe. **Luc Dessart**
15:25	Host galaxies and local environment of long GRBs **Susanna Vergani**
15:45	The Transient High-Energy Sky and Early Universe Surveyor (THESEUS) **Lorenzo Amati**
16:00	**COFFEE BREAK**
16:30	Binary Progenitors of Gamma-Ray bursts and Pair Instability Supernova **Selma De Mink**
16:50	Giant explosions in dwarf hosts - host and local environment of superluminous supernovae **Ting-Wan Chen**
17:10	Super-luminous supernova host galaxies: cosmic evolution, metal aversion and their galaxy environment **Steve Schulze**
17:22	Constraining SLSN and GRB progenitors through their host galaxy environments **Kirsty Taggart**
17:34	Host environments of long GRBs, SLSNe and SNe Ic-BL: implications for progenitors **Jure Japelj**
17:46	Constraining the progenitor evolution of long-duration gamma-ray bursts **Jorick Vink**
18:00	Close

Room 5	SS17 OUTREACH: Making the case for European astronomy and space science: public and political engagement Chair: **Anita Heward**
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Parallel Sessions
16:00	**COFFEE BREAK**
16:30	Making the Case for Astronomy: Panel Discussion **Mike Bode**
16:35	Why should they care? Engaging political audiences with frontier science **Terry O'Connor**
16:50	Citizens' debate: a new way to engage with the general public **Nathalie Meusy**
17:05	Communication to and through politicians **Clare Moody**
17:20	Questions for the panel and debates
18:00	Close

THURSDAY, 5 APRIL

Room 5	SS23 OUTREACH: Reflection on European – African research collaborations in astronomy and space science: opportunities, achievements, challenges, and needs Chair: **Mirjana Povic**
09:00	Session introduction **Mirjana Povic**
09:05	Development in Africa with Radio Astronomy - The DARA Project **Melvin Hoare**
09:20	Astronomy Landscape in Africa **Takalani Nemaungani**
09:35	Lightning talks
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	Parallel Sessions
16:00	**COFFEE BREAK**

This special session has been supported financially by the UK Science and Technology Facilities Council (STFC), Royal Astronomical Society (RAS) and Office of Astronomy for Development (OAD - IAU), European Astronomical Society (EAS), International Science Programme (ISP), Development in Africa with Radio Astronomy (DARA), and local African and European institutions of participants.

THURSDAY, 5 APRIL

Room 6 — SS25 TRANSIENTS: Supernovae as cosmological probes

Chair: **Steven Williams**

09:00	The Dark Energy Survey Supernova Program: The First Cosmological Parameter Constraints **Mathew Smith**
09:25	See Change: Cosmology Through Supernovae in High-z Clusters Observed by HST **Jakob Nordin**
09:50	Cosmology from Type II Supernovae: a bright future **Thomas de Jaeger**
10:05	Superluminous supernovae in cosmology **Cosimo Inserra**
10:20	Poster Short Presentation
10:30	**COFFEE BREAK**
11:00	Tycho Brahe Prize **Andrzej Udalski**
11:30	EAS Lodewijk Woltjer Lecture **Conny Aerts**
12:00	Community session
13:00	Equity and Diversity **Chi Onwurah**
13:00	**LUNCH**
14:30	The Dependance of Type Ia Supernova Luminosities on Their Local Environment **Delphine Hardin**
14:55	Correlations between Type Ia Supernova properties and host galaxy star formation histories. **Elizabeth Swann**
15:10	New Models for Type Ia Supernovae with Spectrophotometric Data from the Nearby Supernova Factory **Clare Saunders**
15:25	SUGAR: Beyond Stretch and Color **Emmanuel Gangler**
15:40	A new statistical framework for analysing photometric samples of Type Ia Supernovae **Maria Vincenzi**
16:00	**COFFEE BREAK**
16:30	Type Ia supernovae from ZTF: implications for cosmology **Ariel Goobar**
16:55	Supernova cosmology with the Large Synoptic Survey Telescope **Renee Hlozek**
17:20	Photometric supernova classification with Bayesian interpretation **Anais Möller**
17:35	Optimize training samples for future supernova surveys using Active Learning **Emille Ishida**
18:00	Close

FRIDAY, 6 APRIL

Hall 1B — S2 MILKY WAY: Gaia: The billion-star galaxy census: at the threshold of Gaia data release 2

Chair: **Anthony Brown**

09:00	The OCCASO survey **Laia Casamiquela**
09:15	Gaia and the Local Dark Matter Density **Hamish Silverwood**
09:30	Recovering and discovering clusters and moving groups with Gaia DR1 and DR2 **Friedrich Anders**
09:45	TGAS calibrated distances to LAMOST main sequence stars **Johanna Coronado Martinez**
10:00	BGM FASt: Big Data and Bayesian methods to infer the IMF and the SFH using Gaia DR2 **Roger Mor**
10:15	Determining Parameters for Nearby Open Clusters with Gaia DR1/TGAS and HSOY Astrometry **Steffi Yen**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	Insights on Galactic outer-disc kinematics from young stellar populations **Amy Harris**
14:45	Modelling star clusters with potential escapers **Ian Claydon**
15:00	Probing the stellar halo in LAMOST-TGAS **João Anônio S. Amarante**
15:15	Rotating globular clusters in the Gaia era **Alice Zocchi**
15:30	The effect of the LMC on streams around the Milky Way **Denis Erkal**
15:45	Constraints on the origin of the high-[a/Fe] component of the Galactic disc on the basis of stellar kinematics in the solar neighbourhood **Ted Mackereth**

16:00	**COFFEE BREAK**
16:30	Predictions for the detection of tidal streams with Gaia using cosmological simulations **Andreea Font**
16:45	Testing Asteroseismic Radii of Dwarfs and Subgiants with Gaia Parallaxes **Christian Sahlholdt**
17:00	Robust modeling of pulsating stars from multiple observational constraints and Gaia parallaxes **Pierre Kervella**
17:15	Precision studies of the white dwarf population with Gaia: what we have learned from DR1 and prospects for DR2 **Martin Barstow**
17:30	Rediscovering the Milky Way with Gaia white dwarfs **Nicola Gentile Fusillo**
17:45	The inclusion of a Gaia parallax in asteroseismic modelling of intermediate- and high-mass stars **May Gade Pedersen**
18:00	Close

FRIDAY, 6 APRIL

Room 4A — S4 SOLAR PHYSICS: High resolution solar physics – the dawn of a new era

Chairs: **Sarah Matthews, Mihalis Mathioudakis**

09:00	High-resolution diagnostics of solar prominences and prominence-like tornadoes **Nicolas Labrosse**
09:13	Simulations of Homologous Jets and Outflow Bursts from Moving Magnetic Features **Peter Wyper**
09:26	Energy Transport by Waves in the Solar Atmoshere **Ineke De Moortel**
09:51	How much can the damping of the observed power spectrum of transverse waves contribute to coronal heating? **Paolo Pagano**
10:00	Discussion
10:17	Poster Short Presentation
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	MHD waves in asymmetric waveguides: Theory and application in the era of high-resolution ground-based solar observations **Noémi Kinga Zsámberger**
14:43	The energetics of MHD waves in complex magnetic flux tubes. **Thomas Howson**
14:56	Kink Instabilities in the Solar Corona Observed By SDO/AIA **Christopher Nelson**
15:09	Periodic Counter Streaming Flows as a Model of the Transverse Wave Induced Kelvin-Helmholtz Instability **Mihai Barbulescu**
15:22	Modelling coronal magnetic field evolution: Comparison of methods **Erin E. Goldstraw**
15:35	Reconnection Microjets in the Solar Corona **Patrick Antolin**
15:47	Poster Short Presentation

16:00	**COFFEE BREAK**
16:30	The role of fine structure in energy transport and particle acceleration in twisted magnetic fields **Philippa Browning**
16:55	Spectropolarimetric inversions of the Ca II 8542 Å line in a M-class solar flare **David Kuridze**
17:08	Non-thermal hydrogen Lyman line and continuum emission in solar flares generated by electron beams **Malcolm Druett**
17:34	The evolution of plasma within an erupting coronal cavity **David Long**
17:47	Summary
18:00	Close

FRIDAY, 6 APRIL

Hall 1A — S8 STAR FORMATION: The formation of stars and planets

Chair: **Derek Ward-thompson**

	Star and planet formation: YSOs
09:00	Interferometric observations of CO Ori with VLTI/GRAVITY: indications for an outflow-based origin for UX Ori-type variability **Claire Davies**
09:15	Resolving the origin of the hydrogen line emission in YSOs with near-infrared interferometry **Alexander Kreplin**
09:30	Accretion and jet in the magnetosphere of young stars, from theory to simulation **Christophe Sauty**
09:45	Ionised gas kinematics in bipolar H II regions **Hannah Dalgleish**
10:00	Where can a Trappist-1 planetary system be produced? **Thomas Haworth**
10:15	Getting know birth function of binary stars: non-interacting binaries **Oleg Malkov**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
	Star and planet formation: circumstellar disks
14:30	Molecular line emission from planet-hosting protoplanetary disks: sulphur monoxide as a potential tracer of a molecular disk wind? **Alice Booth**
14:45	Dust dynamics and growth in young protostellar disks **Eduard Vorobyov**
15:00	The DIANA project - Analysis and Modelling of Multi-wavelength Observational Data from Protoplanetary Discs **Peter Woitke**
15:15	Rings and gaps in the disc around Elias 24 revealed by ALMA **Giovanni Dipierro**
15:30	Dust-trapping vortices, a spiral wake, and a companion candidate in the pre-transitional disc of V1247 Orionis **Stefan Kraus**
15:45	Accretion impacts in young stars with disks: an interdisciplinary approach **Rosaria Bonito**

16:00	**COFFEE BREAK**
	Star and planet formation: planets
16:30	Unveiling planets forming in discs **Giovanni Rosotti**
16:45	The transition from star to planet formation: brown dwarfs in young clusters **Aleks Scholz**
17:00	Exchanging planets between stars in young star-forming regions **Emma Daffern-Powell**
17:15	Exploring the free-floating planet population with the OGLE data **Przemyslaw Mroz**
17:30	Tracing disruption of planetary systems via free-floating exoplanets **Iain McDonald**
17:45	Warping accretion discs with inclined planets **Rebecca Nealon**
18:00	Close

FRIDAY, 6 APRIL

Room 11B — S11 COSMOLOGY: Weak and strong-lensing techniques to unveil mysteries of the Universe

Chair: **Mathilde Jauzac**

09:00	Using machine learning to find strong gravitational lenses **Philippa Hartley**
09:15	Beyond Galaxy Structure with Strong Gravitational Lensing **James Nightingale**
09:30	The stellar populations and molecular gas content of strongly lensed quiescent galaxies at z~2 **Allison Man**
09:45	Stellar versus total mass in lensing galaxies from CFHTLS **Philipp Denzel**
10:00	Observational constraints on the sub-galactic matter-power spectrum from galaxy-galaxy lensing: methodology and first results **Dorota Bayer**
10:15	The dark halo structure and radially varying IMFs of massive early-type galaxies: evidence from strong lensing with MUSE and HST **Lindsay Oldham**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	ALMA observations of lensed Herschel sources : Testing the dark-matter halo paradigm **Aristeidis Amvrosiadis**
14:45	Sub-structures in and around state-of-the-art simulated clusters **Matthieu Schaller**
15:15	Strong lensing signals from self-interacting dark matter clusters **Andrew Robertson**
15:30	New kinds of strongly lensed systems from time-domain surveys **Ariel Goobar**
16:00	**COFFEE BREAK**
16:30	Strong lensing of gravitational waves by massive galaxy clusters **G. P. Smith**
16:45	Challenges and opportunities in cosmology with weak gravitational lensing **Nora Elisa Chisari**
17:15	A weak lensing analysis of the CODEX sample: the density profile of galaxy clusters at z ~ 0.5 **Nathalia Cibirka**
17:30	Multi-tracer high-resolution mass mapping of wide fields **Julian Merten**
17:45	Strong gravitational lensing with KiDS: Exploring the mass distribution in ETGs **Chiara Spiniello**
18:00	Close

FRIDAY, 6 APRIL

Hall 1C

SS1 GALAXIES: Active galactic nuclei: environment, triggering, life cycle, and feedback

Chair: **Jeremy Harwood**

09:00	AGN feedback and galaxy evolution **Francoise Combes**
09:30	A VLBI view on jet-driven HI outflows in powerful radio galaxies **Robert Schulz**
09:42	The impact of AGN feedback on star formation inferred from ALMA and hydrodynamical simulations. **Jan Scholtz**
09:54	SDSS-IV MaNGA: The Spatially Resolved Quenching Histories of AGN host galaxies **Rebecca Smethurst**
10:06	Investigating star formation in quasar host galaxies with gravitational lensing **Hannah Stacey**
10:18	Dust formation and survival in Quasars **Arkaprabha Sarangi**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	AGN environment **Manuela Magliocchetti**
15:00	Low frequency radio continuum in optically selected quasars **Gulay Gurkan**
15:12	Enhancement of AGN activity in a protocluster at z=1.6 **Charutha Krishnan**
15:24	How to Fanaroff-Riley up your life for the best LOFAR survey experience. **Beatriz Mingo**
15:36	Spectral Ageing in Powerful Radio Galaxies **Vijay Mahatma**
15:48	FR-type radio sources in COSMOS: relation to size, accretion modes and large-scale environment **Eleni Vardoulaki**
16:00	**COFFEE BREAK**
16:30	Understanding the triggering of luminous, quasar-like AGN **Clive Tadhunter**
17:00	Is counter-rotating gas fuelling the AGN in S0 galaxies? **Sandra Raimundo**
17:12	Mergers and the triggering of AGN activity, results from the EAGLE simulation. **Stuart Mcalpine**
17:24	The deepest radio view of AGN in the COSMOS field: a two-fold population **Ivan Delvecchio**
17:36	Radio-intermediate AGNs: Host morphologies and triggering **Jonathon Pierce**
17:48	The Triggering of Active Galactic Nuclei in Galaxy Clusters **Kevin Pimbblet**
18:00	Close

Room 13 — SS4 STARS: Atomic and molecular data needs for astronomy and astrophysics

Chair: **Maria Teresa Belmonte**

09:00	The Virtual Atomic and Molecular Data Centre : Current Status and Prospects (VAMDC) **Marie-Lise Dubernet**
09:20	Atomic collision processes in stellar spectroscopy **Paul Barklem**
09:40	Benchmarking Current Capabilities for the Generation of Collisional Atomic Data **Catherine Ramsbottom**
10:00	A Collection of Model Stellar Spectra for Spectral Types B to Early-M **Carlos Allende Prieto**
10:15	New Atomic Data of Singly-Ionised Nickel (Ni II) for Astrophysical Applications **Christian Clear**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	VALD: the meeting point of data producers and data users **Tatiana Ryabchikova**
14:50	Laboratory Atomic Astrophysics **Henrik Hartman**
15:10	Atomic data needs for the modelling of late-type stellar spectra **Karin Lind**
15:30	Data on stark broadening parameters for astronomy and astrophysics **Milan S. Dimitrijević**
15:45	Reflection Absorption Ultraviolet/Visible Spectroscopy for Determining Optical Parameters of Astrochemical Ices **James Stubbing**

FRIDAY, 6 APRIL

16:00	**COFFEE BREAK**
16:30	Successes and difficulties in calculating oscillator strengths and transition rates **Alan Hibbert**
16:50	Molecular data for cool atmospheres **Thomas Masseron**
17:10	Systematical Differences in Spectroscopic Analysis **Ditte Slumstrup**
17:23	The Belgian Repository of fundamental Atomic data and Stellar Spectra: quality assessment of atomic lines **Mike Laverick**
17:36	Modelling needs for warm molecular outflows **Taïssa Danilovich**
17:49	Making the case for detailed photoionization cross section calculations: NLTE models of hot white dwarf atmospheres **Simon Preval**
18:00	Close

FRIDAY, 6 APRIL

Room 11A — SS10 COSMOLOGY: Exploring the high-redshift Universe in the year of JWST

Chairs: **Renske Smit, Rebecca Bowler, Ana Paulino-Afonso**

09:00	Probing primeval galaxies with JWST **Emma Curtis Lake**
09:30	Extremely Low-Luminosity Galaxies in the Early Universe: New Horizons for Hubble, Spitzer, and James Webb **Bruno Ribeiro**
09:45	The first billion years of galaxy formation in cold and warm dark matter cosmologies with JWST **Pratika Dayal**
10:00	He II emission from the First Stars **Jorick Vink**
10:15	Poster Short Presentation
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	Low redshift analogs of distant galaxies and lessons for JWST **Anne Jaskot**
15:00	Star forming clumps in high-z starbursts local analogs **Matteo Messa**
15:15	Chemical properties of Blue Compact Dwarf Galaxies: Local Analogues of High Redshift Galaxies **Nimisha Kumari**
15:30	Insights into the high redshift Universe from cosmic noon studies of CIII] and CIV **Andra Stroe**
15:45	Synthetic nebular emission from young galaxy populations: Distinguishing their ionizing sources **Michaela Hirschmann**
16:00	**COFFEE BREAK**
16:30	The extreme faint end of the UV LF through gravitational telescopes **Hakim Atek**
17:00	Rest-UV Spectroscopy of Galaxies in the Reionization Era **Ramesh Mainali**
17:15	UV light and Lya halos: could they help us to understand the reionization? **Ana Paulino-Afonso**
17:30	The MUSE Hubble Ultra Deep Field Survey: The Faint-End of the Lya Luminosity Function and Implications for Reionisation **Alyssa Drake**
17:45	Resolved spectroscopy of luminous Lyman-alpha emitters in the epoch of reionization **Jorryt Matthee**
18:00	Close

Room 12 — SS13 GALAXIES: Galaxy clusters and groups across cosmic time

Chair: **John Stott**

09:00	Planck vs. Planck: Status of the Cluster Counts and Implications **James Bartlett**
09:23	The Atacama Cosmology Telescope SZ galaxy cluster survey **Matt Hilton**
09:34	XMM Cluster Survey: Project update, with a Dark Energy Survey Focus **Kathy Romer**
09:45	The Luminosity-velocity dispersion relation of galaxy groups and clusters detected in the XXL and GAMA surveys **Paul Giles**
09:56	Studying the faint end of clusters and groups of galaxies via X-ray surface brightness fluctuations **Alexander Kolodzig**
10:07	Formation and heating processes of the intracluster medium **Dominique Eckert**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	Galaxy Kinematics and Mass Calibration in Massive SZE Selected Galaxy Clusters to z=1.3 **Raffaella Capasso**
14:41	Covariances of galaxy cluster shape parameters **Florian Käfer**
14:53	The role of cosmological simulations in cluster cosmology **Ian McCarthy**
15:16	Shaken Snow Globes: Kinematic and Thermodynamic Tracers of the Multiphase Condensation Cascade in Groups and Clusters **Massimo Gaspari**
15:27	A day in the life (of a galaxy cluster) **Franco Vazza**
15:38	Dynamical mass estimates of C-EAGLE clusters **Thomas Armitage**
15:49	Galaxy Protoclusters in Semi-Analytic and Hydrodynamic Simulations **Christopher Lovell**

16:00	**COFFEE BREAK**
16:30	The evolution of the star formation activity in massive halos. **Paola Popesso**
16:53	Stellar populations of high-z protoclusters from the CARLA survey **Stefania Amodeo**
17:04	Uncovering the Intra-Group Medium in absorption **Richard Bielby**
17:15	Cosmic tsunamis and tornadoes **Andra Stroe**
17:26	The role of the brightest cluster galaxy in the life cycle of cold and cooling gas in galaxy cluster cores. **Stephen Hamer**
17:37	The ALMA Fornax Cluster Survey: How do dense environments drive galaxy evolution? **Nikki Zabel**
17:48	Tracing the transition from galaxy halos to the intra-cluster light with stellar kinematics **Johanna Hartke**
18:00	Close

FRIDAY, 6 APRIL

Room 5, 6 and 8	SS15 SOFTWARE: Hack/Market day Chair: **Matteo Bachetti**
09:00	Introduction to the market/Hack Together Day - The SOC
09:10	Various activities
	Hacking around the cosmological code SWIFT **Matthieu Schaller**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	Various activities
16:00	**COFFEE BREAK**
16:30	Various activities
17:00	Wrap up: discussion of main results of the day, short presentations by subgroups
18:00	Close

FRIDAY, 6 APRIL

Room 11C — SS18 STRONG GRAVITY: Multimessenger Astronomy with gravitational waves

Chair: **Shiho Kobayashi**

09:00	Fermi and Swift Observations of Gravitational Wave Events **Judith Racusin**
09:25	Illuminating Gravitational Waves **Mansi Kasliwal**
09:50	The spectroscopic evolution of AT2017gfo as seen by VLT/X-shooter and the implications for kilonova models. **Jonatan Selsing**
10:00	The host galaxy and merger site of GW170817: progenitor constraints from environmental analyses **Joe Lyman**
10:10	Modelling the X-ray and radio emission of GRB170817A/GW170817 with off-axis GRB-afterglow models **Steve Schulze**
10:20	Using GW-EM Counterparts to Probe the Structure and Dynamics of Relativistic Jets from Neutron Star or Black Hole Neutron Star Mergers **Gavin Lamb**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	Kilonova Emission from a Binary Neutron Star Merger **Brian Metzger**
14:55	GW170817 in the Context of Cosmological Short-duration Gamma-ray Bursts **Wen-Fai Fong**
15:20	The Diversity of Kilonova Emission in Short Gamma-Ray Bursts **Ben Gompertz**
15:32	Constraining the Host Morphologies of Compact Binary Mergers through the Cosmic History **Soheb Mandhai**
15:44	Observations of strong-lensing galaxy clusters within Gravitational Wave sky localisations **G. P. Smith**
15:56	Resonant Shattering Flares Multi-Messenger Probes of Neutron Star Physics **David Tsang**
16:00	**COFFEE BREAK**
16:30	Neutron star mergers and the begin of multi-messenger astrophysics **Stephan Rosswog**
16:55	LIGO/Virgo GW observations in the era of multi-messenger astronomy **Gianluca M. Guidi**
17:20	Machine learning classification for detection of neutron-star-black-hole systems in LIGO-Virgo **Thomas Dent**
17:32	ASTERICS and the Challenges of Multi-Messenger Astrophysics **Giuseppe Cimo**
17:44	The e-ASTROGAM gamma-ray observatory mission **Lorraine Hanlon**
17:56	Multimessenger astronomy with the Liverpool Telescope and Liverpool Telescope 2 **Chris Copperwheat**
18:00	Close

Room 14 — SS26 INSTRUMENTATION: Surveys in the ELT era

Chair: **Lex Kaper**

09:00	The ESO's Extremely Large Telescope: the future of European ground-based astronomy **Michele Cirasuolo**
09:15	HARMONI, the ELT first light spectrograph: science & capabilities. **Niranjan Thatte**
09:30	MOSAIC at the ELT: A Gigantic Step into the Deep Universe **Francois Hammer**
09:45	Surveys with ELT HIRES, an optical-NIR high resolution spectrograph for the ELT **Alessandro Marconi**
10:00	GMT: Current Status and Spectrographs Suite **Rebecca Bernstein**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	Spectroscopic Surveys of Resolved Stellar Populations with the ELT **Eva Grebel**
14:45	The atmospheric characterization of transiting exoplanets with the ELT **Jean-Michel Desert**
15:00	The Gaia-ESO Survey **Anais Gonneau**
15:15	Resolved stellar populations in nearby galaxies: from VLT-MUSE to ELT-MOS **Andreas Kelz**
16:00	**COFFEE BREAK**
16:30	Transients spectroscopy in the ELT era **Paul Groot**
16:45	Studying the Intergalactic Medium with the E-ELT Multi-Object Spectrograph MOSAIC **Simon Morris**
17:30	Discussion
18:00	Close

FRIDAY, 6 APRIL

Room 4B — SS29 TRANSIENTS: The state of the art and future of panchromatic nova science

Chair: **Luca Izzo**

09:00	Recurrent novae and symbiotic novae **Joanna Mikolajewska**
09:20	Breaking the Habit - The peculiar 2016 eruption of the remarkable recurrent nova in M31 **Martin Henze**
09:30	Panchromatic observations of the recurrent nova LMC 1968 **Paul Kuin**
09:40	The Nova Population of the Andromeda Galaxy **Steven Williams**
10:00	Three faces of novae - supernova Ia progenitors, fast transients, supersoft X-ray sources **Monika Soraisam**
10:10	Classical novae from the OGLE survey **Przemyslaw Mroz**
10:20	Search for gamma-ray emission from Galactic novae with the Fermi-LAT **Anna Franckowiak**
10:30	**COFFEE BREAK**
11:00	ESO report **Xavier Barcons**
11:30	ESA report **Günther Hasinger**
12:00	The Square Kilometre Array (SKA): a physics machine for the 21st Century **Philip Diamond**
12:30	Birth and perspectives of gravitational-wave and multi-messenger astronomy **Marica Branchesi**
13:00	Closing Ceremony
13:30	**LUNCH**
14:30	Multidimensional models of classical nova outbursts **Jordi Jose**
14:50	Hydrodynamic Simulations of Thermonuclear Runaways on CO and ONe White Dwarfs: 7Be Production and the Growth to the Chandrasekhar Limit **Sumner Starrfield**
15:00	Presence of beryllium-7 in classical novae: recent results and consequences **Paolo Molaro**
15:10	The nova cycle **Claus Tappert**
15:30	How does T Corona Borealis accumulate sufficient fuel for recurrent eruptions? **Koji Mukai**
15:40	Boosting photoionization models with high-resolution data cubes: Nova V723 Cas revisited **Larissa Takeda**
15:50	Ancient novae and the evolution of CVs **Linda Schmidtobreick**

FRIDAY, 6 APRIL

16:00	**COFFEE BREAK**
16:30	Shocks and Particle Acceleration in Novae **Brian Metzger**
16:50	High-energy phenomena as a measure of mass ejection in novae **Pierrick Martin**
17:00	Soft and hard X-rays emission in novae **Marina Orio**
17:20	In search of shocks: X-ray observations of nova eruptions at early times with NuSTAR **Thomas Nelson**
17:30	Radio Observations of Novae **Thomas Nelson**
17:40	Ageing Classical Nova Shells **Eamonn Harvey**
17:50	The Intriguing Misalignment Between Radio and Optical Structures in V5668 Sgr **Justin Linford**
18:00	Close

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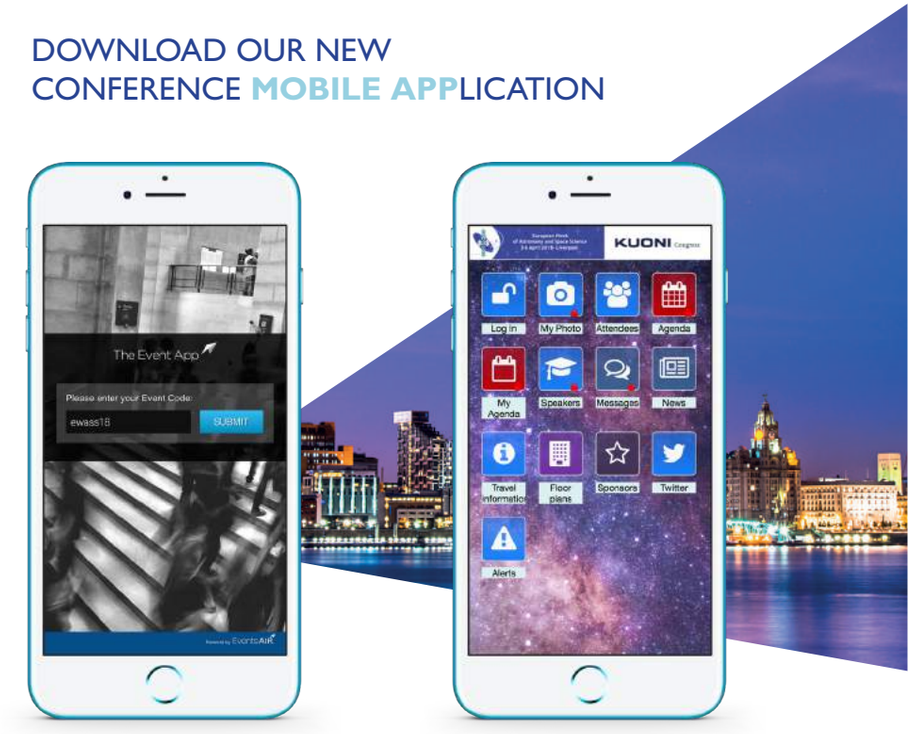

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POSTERS

LS3.01	Wed - Thu	Openness to open science - Open Access Models in astronomy. **Ewa Chmielewska**
S1.01	Tue - Wed	Discerning the nature of dark matter with observations of the high redshift Universe **Mark Lovell**
S1.02	Tue - Wed	PEGASE.3 SED templates of galaxy spectrochemical evolution with dust **Rocca Volmerange Brigitte**
S1.03	Tue - Wed	Predictions for deep galaxy surveys with JWST from LCDM **William Cowley**
S1.04	Tue - Wed	The evolution of galaxy stellar mass functions at z = 6-9 in the Hubble Frontier Fields: Unveiling the potential science with JWST. **Rachana Bhatawdekar**
S2.01	Thu - Fri	Chemo-kinematic properties of metal-poor stars from the Gaia-ESO Survey **Denise Castro**
S2.02	Thu - Fri	First 3D simulations of white dwarfs with pure-helium atmospheres **Elena Cukanovaite**
S2.03	Thu - Fri	Kinematics of the red clumps in the Milky Way disc **Martín López-Corredoira**
S2.04	Thu - Fri	Tycho-Gaia vs Gaia DR2 **Daniel Michalik**
S2.05	Thu - Fri	Discoveries of new white dwarfs using Gaia data **Areg Mickaelian**
S2.06	Thu - Fri	The interstellar extinction of the Gaia stars **Aleksandr Mosenkov**
S3.01	Wed - Thu	Star-forming dwarf galaxies at z>1 in the VIMOS Ultra Deep survey: New insights on the low-mass end of the mass-metallicity relation **Ricardo Amorin**
S3.02	Wed - Thu	Probing the formation of the first galaxies and reionization with the Hubble Frontier Fields **Rachana Bhatawdekar**
S3.03	Wed - Thu	An Empirical Determination of the Dust Mass Absorption Coefficient, κd, and its Variation Within Nearby Galaxies **Christopher Clark**
S3.04	Wed - Thu	Compact galaxies: the simulation's view **De La Rosa G Ignacio.**
S3.05	Wed - Thu	The Evolution of Dusty and Non-Dusty Galaxies with Stellar Mass at z=2-6 from the SMUVS Survey **Smaran Deshmukh**
S3.06	Wed - Thu	Calibrating the galaxy color redshift relation for Euclid and mapping the star formation main sequence **Oliver Díaz-Rodríguez**
S3.07	Wed - Thu	Galaxies with peculiar kinematics in the Illustris simulation **Ivana Ebrova**
S3.08	Wed - Thu	Age Determinations of Hyades, Praesepe, and Pleiades via MESA models with Rotation **Seth Gossage**
S3.09	Wed - Thu	Lya emission in the AzTEC-3 porto-cluster field **Lucia Guaita**
S3.10	Wed - Thu	Candidate Massive Galaxies at z ~ 4 in the Dark Energy Survey **Pierandrea Guarnieri**
S3.11	Wed - Thu	A resolved study of the radio continuum vs star formation rate relation in nearby dwarf galaxies **Luke Hindson**
S3.12	Wed - Thu	A search for ultrabright high-z submillimeter lensed galaxies **Susana Iglesias-Groth**

POSTERS

S3.13	Wed - Thu	The formation of spheroidal galaxies via minor-merger-triggered disc instabilities **Ryan Jackson**
S3.15	Wed - Thu	Galaxy Zoo, Builder: Detailed morphologies from Human Guided in-browser optimisation **Timothy Lingard**
S3.16	Wed - Thu	The formation of massive spheroids in the early Universe: insights from the structure of post-starburst galaxies **David Maltby**
S3.17	Wed - Thu	The origin of scatter in the star formation rate - stellar mass relation in EAGLE **Jorryt Matthee**
S3.18	Wed - Thu	The Role of Faint Embedded AGN in Star-formation Across Cosmic Time: Results from the DR-1 Image & Data Release from the e-MERGE Study of the μJy Radio Source Population in GOODS-N **Tom Muxlow**
S3.19	Wed - Thu	The Spatially Resolved Stellar Initial Mass Function in ~400 Early-Type Galaxies with SDSS-IV MaNGA **Taniya Parikh**
S3.20	Wed - Thu	LAEs: don't ever change? Ask me why! **Ana Paulino-Afonso**
S3.21	Wed - Thu	Bars and galaxy interactions in the Illustris simulation **Nicolas Peschken**
S3.22	Wed - Thu	"Observations" of Simulated Dwarf Galaxies **Shivangee Rathi**
S3.23	Wed - Thu	The Far-Infrared Radio Correlation with LOFAR at low redshift **Shaun Read**
S3.24	Wed - Thu	The impact of dark energy on galaxy formation. What does the future of our Universe hold? **Jaime Salcido**
S3.25	Wed - Thu	Resolving the ancient star formation of dwarf galaxies in the Local Group and beyond. **Alessandro Savino**
S3.26	Wed - Thu	Galactic Abundance Profiles over Time **Ralph Schoenrich**
S3.27	Wed - Thu	The relationship between the morphology and kinematics of EAGLE galaxies **Adrien C. R. Thob**
S3.28	Wed - Thu	ATACAMA: A Lyman alpha blob finder **Romain Thomas**
S3.29	Wed - Thu	Studying Galaxy Evolution Through Cosmic Time via the μJy Radio Source Population: Results from the eMERLIN Galaxy Evolution Survey (eMERGE) DR1 **Alasdair Thomson**
S3.30	Wed - Thu	The Star-forming Progenitors of Local Passive Galaxies Quenched Primarily through Strangulation **James Trussler**
S3.31	Wed - Thu	k-means clustering in galaxy feature data from the GAMA survey **Sebastian Turner**
S3.32	Wed - Thu	Radio continuum emission as a tracer for star formation in the dwarf starburst galaxy NGC 1569 **Jonathan Westcott**
S3.33	Wed - Thu	Exploring the Epoch of Reionisation with the BLUETIDES simulation **Stephen Wilkins**
S3.34	Wed - Thu	Spatial distrubution of dust in galaxies from the Integral field unit data **Tayyaba Zafar**

POSTERS

S4.01	Thu - Fri	Observations and numerical models of coronal heating associated with spicules and PCDs **Ineke De Moortel**
S4.02	Thu - Fri	MARVEL Analysis of BaO: Generation of magnetic field lande g-factors **Maire Gorman**
S4.03	Thu - Fri	Constraints on coronal heating: A large study of transition region/coronal rapid brightenings using IRIS and AIA data **Llyr Humphries**
S4.04	Thu - Fri	Flare Related Recurring Active Region Jet : Evidence for Very Hot Plasma **Helen Mason**
S4.05	Thu - Fri	Repetitive photospheric reconnection leading to chromospheric fan-shaped jets **Mihalis Mathioudakis**
S4.06	Thu - Fri	Centre-to-limb variation over the solar disk of Ca II lines **Alexander G. M. Pietrow**
S4.07	Thu - Fri	Converted p-modes as a wave driver for coronal loop simulations **Julia M. Riedl**
S4.08	Thu - Fri	Observations of Alfvénic waves using CoMP **Ajay Tiwari**
S4.09	Thu - Fri	Coronal heating by phase mixing **Hendrik-Jan Van Damme**
S4.10	Thu - Fri	The Effect of Magnetic Field Inclination on The Rayleigh-Taylor Instability **Eleanor Vickers**
S5.01	Tue - Wed	Radial velocities, meridional circulation, and reverse advection in accretion discs **Pavel Abolmasov**
S5.02	Tue - Wed	Reconstruction of initial spin periods of radiopulsars **Anton Biryukov**
S5.03	Tue - Wed	Formation of the magnetic obliquity distribution in recycled pulsars **Anton Biryukov**
S5.04	Tue - Wed	Understanding pulsar emission considering a rotating off-centred dipole **Anu Kundu**
S5.05	Tue - Wed	The theory of Graviton Trajectory **James Lloyd**
S6.01	Wed - Thu	Accuracy vs. Resolution: Choosing the best hydrodynamics scheme for your problem **Joshua Borrow**
S6.02	Wed - Thu	CosmoHub on Hadoop: Interactive analysis and distribution of cosmological data **Jordi Casals**
S6.03	Wed - Thu	PAUdm at PIC: data management solutions for a cosmological multi-band survey in a High Throughput Data Center **Jorge Carretero Palacios**
S6.04	Wed - Thu	Cosmic Ray data at the ASI Space Science Data Center **Federico Donnini**
S6.05	Wed - Thu	Using open software and open standards for operating robotic telescopes **Tim-Oliver Husser**
S6.06	Wed - Thu	Is Relational Database Management System still the rule of thumb for an Astronomical Archive? **Marco Lam**
S6.07	Wed - Thu	Building a Diverse, Flexible Follow-up Network for Time Domain Astronomy **Tim Lister**

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S6.09	Wed - Thu	Using the LSST pipeline to process high-cadence survey data today **Lydia Makrygianni**
S6.10	Wed - Thu	An automated pipeline for Variability Detection and Classification for the Liverpool Telescope SkyCams. **Paul Ross McWhirter**
S6.11	Wed - Thu	Image analysis algorithms for the Euclid photometric pipeline **Emiliano Merlin**
S6.12	Wed - Thu	DECA: A new Python package for galaxy image decomposition **Aleksandr Mosenkov**
S6.13	Wed - Thu	A comparison of SOFA and NOVAS astrometric software libraries **Andrzej Piascik**
S6.14	Wed - Thu	New access to on-the-fly data processing services from the XMM-Newton Science Archive **Aitor Ibarra**
S6.15	Wed - Thu	General-Purpose Software for Managing Astronomical Observing Programs in the LSST Era **Rachel Street**
S6.16	Wed - Thu	SPARTAN: A multi component galaxy fitting tool **Romain Thomas**
S6.17	Wed - Thu	Global software for global radio astronomy: the making of a VLBI toolkit for CASA **Ilse M. Van Bemmel**
S6.18	Wed - Thu	Visual Analytics and Semantic Interaction to Explore Astronomical Data **John Wenskovitch**
S7.01	Tue - Wed	AMPEL: A software framework for selecting, analyzing and monitoring transients detected by ZTF **Valery Brinnel**
S7.02	Tue - Wed	The Unusual Interacting Supernova LSQ13ddu **Peter Clark**
S7.03	Tue - Wed	Constraints for Progenitor Stars of Type Ib/c Supernovae by Spectroscopic Analysis of the Local Supernovae Environments **Rudi Ganss**
S7.04	Tue - Wed	Towards understanding common envelope jets supernovae (CEJSNe) and iPTF14hls **Avishai Gilkis**
S7.05	Tue - Wed	A mixed helium-oxygen layer in some core-collapse supernova progenitors **Roni Anna Gofman**
S7.06	Tue - Wed	The imprints of jets on morphologies of core collapse supernova remnants **Aldana Grichener**
S7.07	Tue - Wed	Type II supernovae in low luminosity host galaxies **Gutiérrez Claudia**
S7.08	Tue - Wed	A type-Ic supernova interacting with a hydrogen-rich circumstellar medium **Hanindyo Kuncarayakti**
S7.09	Tue - Wed	Exploring the diversity of early supernova light curves with high-cadence photometry **Emmanouela Paraskeva**
S7.10	Tue - Wed	Spectroscopy of the massive yellow supergiant HD50975 **Karlis Pukitis**
S7.11	Tue - Wed	The Palomar Transient Factory - The Core-Collapse-Supernova Data Release 1 **Steve Schulze**
S7.12	Tue - Wed	Type IIb Supernovae in 3 Dimensions. **Heloise F. Stevance**
S7.13	Tue - Wed	The Time Domain Extragalactic Survey **Elizabeth Swann**

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S7.14	Tue - Wed	Clues on the progenitors of long GRBs, SLSNe and Ic-BL SNe from the comparison of the properties of their host galaxies. **Susanna Vergani**
S8.01	Thu - Fri	First year of 6.7 GHz methanol maser monitoring **Artis Aberfelds**
S8.02	Thu - Fri	Ice Spectroscopy, Scattering and Levitation: A New Laboratory Perspective **Anita Dawes**
S8.03	Thu - Fri	The production rate of second and third generation discs in evolved binaries. **Miriam Hogg**
S8.04	Thu - Fri	Unveiling massive star formation with multiwavelength observations **John Ilee**
S8.05	Thu - Fri	Constraints on the structure of hot exozodiacal dust belts and their observability in the MIR **Florian Kirchschlager**
S8.06	Thu - Fri	A view of Herschel Galactic Cold Cores from molecular emission surveys **Orsolya Feher**
S8.07	Thu - Fri	The Ku-band Galactic Reconnaissance Survey **Mubela Mutale**
S8.08	Thu - Fri	Initial size of a protoplanetary disk and transport limit of organics and ice **Hiroko Nagahara**
S8.09	Thu - Fri	The Effects of External Photoevaporation in Sub-structured Environments **Rhana Nicholson**
S8.10	Thu - Fri	Gas and dust in FU Orionis objects with Herschel and ProDiMo **Andreas Postel**
S8.11	Thu - Fri	Unveiling the Dynamics of the Barnard 59 star-forming Clump **Elena Redaelli**
S8.12	Thu - Fri	The role of episodic mass accretion in stellar and planetary formation **Evgeni Semkov**
S8.13	Thu - Fri	Discovery of Exoplanets Orbiting Hot, Fast-rotating Stars **Lorna Temple**
S8.14	Thu - Fri	Massive star formation and the impact of stellar feedback: The case of the G316.7 massive-star-forming ridge **Elizabeth Watkins**
S9.01	Tue - Wed	Infall of circumgalactic gas as a way to feed galaxy star formation **Andrea Afruni**
S9.02	Tue - Wed	Integral Field Spectroscopy of Extremely Blue and Dust-Rich Galaxies in the Local Universe **Zoe Ballard**
S9.03	Tue - Wed	DustPedia: The interstellar medium scaling relations as tool to study the galaxy evolution **Viviana Casasola**
S9.04	Tue - Wed	Dust in Low-Metallicity LITTLE THINGS **Phil Cigan**
S9.05	Tue - Wed	DustPedia: Multiwavelength Photometry & Imagery of 875 Nearby Galaxies in 42 Ultraviolet-Microwave Bands **Christopher Clark**
S9.06	Tue - Wed	DUSTKING: dust attenuation in nearby galaxies **Marjorie Decleir**
S9.07	Tue - Wed	Dust Emission in the Haloes of Edge-On Galaxies **Ruth Evans**
S9.08	Tue - Wed	Rainfalls in Galaxies: the Top-Down Multiphase Condensation Model **Massimo Gaspari**
S9.09	Tue - Wed	ALMA Investigations of Five Dusty Early-Type Galaxies **David H.W. Glass**
S9.10	Tue - Wed	A direct calibration of the IRX-β relation at z=3-5 **Maciej Koprowski**

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S9.11	Tue - Wed	Galaxies in the ELAIS N1 field **Tímea Orsolya Kovács**
S9.12	Tue - Wed	Galactic foreground of GRB051022 **Tímea Orsolya Kovács**
S9.13	Tue - Wed	Mapping ionised gas in the Blue Compact Dwarfs: Local analogues of high redshift galaxies **Nimisha Kumari**
S9.14	Tue - Wed	Dust properties of nearby galaxies inferred from hierarchical Bayesian FIR SED fitting **Isabella Lamperti**
S9.15	Tue - Wed	Interstellar medium parameterization with modern photometric surveys **Oleg Malkov**
S9.16	Tue - Wed	Magneto-thermo-turbulent star formation in cosmic zoom-in spiral galaxies **Sergio Martin-Alvarez**
S9.17	Tue - Wed	MAGPHYS modelling: can it fit SEDs to curious local galaxies? **Jenifer S. Millard**
S9.18	Tue - Wed	Exploring the ISM of the Milky Way using the Besançon Galaxy model **Julien Montillaud**
S9.19	Tue - Wed	Optical coherence in astrophysics. **Jacques Moret-Bailly**
S9.20	Tue - Wed	Radiative transfer modeling of barred DustPedia galaxies. **Angelos Nersesian**
S9.21	Tue - Wed	Outstanding Radio-Imaging or OrioN-B: using a nearby GMC as a template to study star forming regions in nearby galaxies **Jan Orkisz**
S9.22	Tue - Wed	ISM, Lyman-Alpha and Lyman-continuum at high and low redshifts: An apples-to-apples comparison **T. Emil Rivera-Thorsen**
S9.23	Tue - Wed	The cold ISM content in high redshift post-starburst galaxies **Kate Rowlands**
S9.24	Tue - Wed	Early-Type Galaxies detected in Herschel Surveys. **Anne Sansom**
S9.25	Tue - Wed	The sensitivity of galaxy metallicity curves on the employed metallicity diagnostic **Patricia Schady**
S9.26	Tue - Wed	What radial abundance profiles tell us about Galactic Evolution **Ralph Schoenrich**
S9.27	Tue - Wed	Star formation from Galactic scales to stellar clusters **Romas Smilgys**
S9.28	Tue - Wed	Dust, Gas and Star-Formation in Andromeda **Matthew Smith**
S9.29	Tue - Wed	Investigating the star-formation/density relation in CL J1449+0856, a cluster at z=2 **Connor Smith**
S9.30	Tue - Wed	Come together: early ionised bubbles as [CII] over-densities? **David Sobral**
S9.31	Tue - Wed	Decoding the spectral energy distribution of M33 **Jordan Thirlwall**
S9.32	Tue - Wed	The evolution of dust properties: comparing H-ATLAS to EAGLE simulations **Ana Trčka**
S9.33	Tue - Wed	Mapping the interstellar medium with Diffuse Interstellar Bands **Jacco van Loon**
S9.34	Tue - Wed	Origins Space Telescope: HEterodyne Receiver for OST (HERO) **Elvire De Beck**
S9.35	Tue - Wed	Probing the ISM at very-high redshift with JWST **Stephen Wilkins**

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S10.01	Wed - Thu	Vertical Mixing in Hot Jupiter Atmospheres: 2D post-processing coupling general circulation and disequilibrium chemistry **Robin Baeyens**
S10.02	Wed - Thu	Predicting the likelihood of life and similarities of Exoplanets to solar-system terrestrial planets from an Interstellar Vehicle using an Artificial Neural Network. **Christopher Bishop**
S10.03	Wed - Thu	Radio Occultation Experiments with Venus Express using the Planetary Radio Interferometry and Doppler Experiment (PRIDE) Technique **Tatiana Bocanegra Bahamon**
S10.04	Wed - Thu	New ExoMol line lists for PO, PS, SiH, NS and SH. **Maire Gorman**
S10.05	Wed - Thu	Calculation of a line list for MnH for brown dwarf and exoplanetary applications. **Maire Gorman**
S10.06	Wed - Thu	Consistent chemical kinetic calculations on the pressure-temperature profiles of hot Jupiters with ATMO and STAND2015. **Éric Hébrard**
S10.07	Wed - Thu	CHEOPS: the CHaracterising ExOPlanet Satellite **Kate Isaak**
S10.08	Wed - Thu	Observing with CHEOPS **Kate Isaak**
S10.09	Wed - Thu	Ground-based observations of exoplanets transiting nearby M stars **Valentin Ivanov**
S10.10	Wed - Thu	Importance of disequilibrium processes when characterizing an exoplanetary atmosphere. **M Lampón.**
S10.11	Wed - Thu	Evidence of Nitrogen Chemistry in Hot Jupiter Atmospheres **Ryan MacDonald**
S10.12	Wed - Thu	SPEARNET: Developing a Metric for Exoplanet Transmission Spectroscopy Studies **Jake Morgan**
S10.13	Wed - Thu	Connecting planetary atmospheres and laboratory analogues using ENDGame, the Met Office's dynamical core **Susie Wright**
S11.01	Thu - Fri	New results of the time delays in the gravitationally lensed quasar Q2237+0305 **Liudmyla Berdina**
S11.02	Thu - Fri	New Approaches to Small-Scale CMB Lensing **Boryana Hadzhiyska**
S11.03	Thu - Fri	Microlensing of the Broad Emission Lines in gravitationally lensed Quasars: Broad Line Region Geometry and Kinematics **Arnold Hanslmeier**
S11.04	Thu - Fri	Mapping the Universe with weak lensing **Benjamin Mawdsley**
S11.05	Thu - Fri	AutoLens: Automated Modeling of a Strong Lens's Light, Mass and Source **James Nightingale**
SS1.01	Thu - Fri	Gamma-ray absorption by realistic broad line regions in blazars **Pavel Abolmasov**
SS1.02	Thu - Fri	The nature of radio and optically variable radio sources **Hayk Abrahamyan**
SS1.03	Thu - Fri	Relativistic reflection in the population of Active Galactic Nuclei at z=0.5-4 **Linda Baronchelli**
SS1.04	Thu - Fri	Multi-phase characterization of outflows observed in type 2 radio-quiet QSOs using near-infrared EMIR/GTC data **Enrica Bellocchi**

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SS1.05	Thu - Fri	Imaging the Sunyaev-Zel'dovich effect at ALMA to constrain feedback mechanisms **Sim Brownson**
SS1.06	Thu - Fri	Is AGN feedback so efficient to quench star formation in the host galaxy? **Stefano Carniani**
SS1.07	Thu - Fri	The X-ray-to-radio luminosity distribution of AGN out to z~3 **Ivan Delvecchio**
SS1.08	Thu - Fri	The linear bias of radio loud active galactic nuclei via cosmic microwave background lensing **Carolyn Devereux**
SS1.09	Thu - Fri	Galaxies with supermassive black hole binaries – the case of 3C66B **Rosa Victoria Dimitrova**
SS1.10	Thu - Fri	Seyfert Physics revealed by Optical Emission Lines in the S7 IFU Survey **Michael Dopita**
SS1.11	Thu - Fri	Flickering Black Holes in the Distant Universe **Elizabeth Elmer**
SS1.12	Thu - Fri	Unifying the Micro and Macro Properties of AGN Feedback and Feeding **Massimo Gaspari**
SS1.13	Thu - Fri	Modelling tidal disruption events with a moving-mesh **Felipe Goicovic**
SS1.14	Thu - Fri	Modelling radio jets across cosmic time **Andrew Griffin**
SS1.15	Thu - Fri	Does the probability that a galaxy hosts a powerful AGN depend on its star-forming properties? **Liam Grimmett**
SS1.16	Thu - Fri	Warm, Optically Thick Coronae in Magnetically Supported Disks **Dominik Gronkiewicz**
SS1.17	Thu - Fri	Mechanical and radiative AGN feedback drive powerful, galactic outflows in cosmological simulations of massive galaxies **Michaela Hirschmann**
SS1.18	Thu - Fri	The low-luminous AGN in the CALIFA survey **Sanja Jonic**
SS1.20	Thu - Fri	The Southern Large DRAGN Survey **Hongming Tang**
SS1.21	Thu - Fri	Evidence for positive AGN feedback and rapid quenching through gas depletion **Allison Man**
SS1.22	Thu - Fri	Statistical study of AGN properties in the Local Universe **Areg Mickaelian**
SS1.23	Thu - Fri	Kpc-scales cold-gas outflows in typical low-redshift galaxies are driven by star-formation, not AGN. **Borislav Nedelchev**
SS1.24	Thu - Fri	Using VO tools to iNvestIgate Quasar Spectra (UNIQS) **Swayamtrupta Panda**
SS1.25	Thu - Fri	A radio transient as evidence for a binary nucleus in Cygnus A **Daniel Perley**
SS1.26	Thu - Fri	Do black holes regulate the growth of massive galaxies? **Joanna Ramasawmy**
SS1.27	Thu - Fri	Ultra-efficient photometric Reverberation Mapping of high-z AGN with IO:O **Shaun Read**
SS1.28	Thu - Fri	The dominant source of outflows in the local Universe: can star-formation or an AGN quench a galaxy? **Guido Roberts-Borsani**
SS1.30	Thu - Fri	Jet production efficiency in compact radio sources **Katarzyna Rusinek**

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SS1.31	Thu - Fri	The IFU view of Narrow-line Seyfert 1 galaxies **Julia Scharwächter**
SS1.32	Thu - Fri	Fuelling of Active Galactic Nuclei in Groups of Galaxies **Tom Sedgwick**
SS1.33	Thu - Fri	A spectroscopic analysis of quasars from the Sloan Digital Sky Survey **Marzena Śniegowska**
SS1.34	Thu - Fri	When radio-loud AGNs are loud? **Aleksandra Solarz**
SS1.36	Thu - Fri	The most extreme active galactic nucleus known **Jacco van Loon**
SS1.37	Thu - Fri	Ionized gas outflows in active galactic nuclei: a detailed study from the MAGNUM survey **Giacomo Venturi**
SS1.38	Thu - Fri	Finding kpc-scale jets in active galaxies with LOFAR **Brendan Webster**
SS1.39	Thu - Fri	Investigating the radio emission in nearby galaxies with the LeMMINGs survey **David Williams**
SS1.40	Thu - Fri	LeMMINGS: the eMERLIN radio legacy survey of nearby galaxies **David Williams**
SS1.42	Thu - Fri	Observational signatures of AGN feedback across cosmic time **Dominika Wylezalek**
SS2.01	Tue - Wed	Data sonification for use by independent filmmakers: SSFX (Space Sound Effects) Short Film Festival **Martin Archer**
SS2.02	Tue - Wed	Protecting and Valuing the Night Sky - Ancient Monuments Connecting People of Today and the Past to the Sky **Daniel Brown**
SS2.03	Tue - Wed	Imagining the Sun: using art and science as a lens for exploration of solar physics. **Carol Davenport**
SS2.04	Tue - Wed	Textiles in Astrophysics **Jane Greaves**
SS2.06	Tue - Wed	SunSpaceArt **Helen Mason**
SS2.08	Tue - Wed	COSMOS: A programme of audio-visual installations on the Lovell Telescope **Tim O'Brien**
SS2.09	Tue - Wed	Code for Everything: a series of art installations exploring the coded light of the Universe **Anne-Marie Weijmans**
SS3.01	Thu - Fri	Spectral timing with multiple detectors **Matteo Bachetti**
SS3.02	Thu - Fri	The nature of jets in powerful radio galaxies **Emmanuel Bempong-Manful**
SS3.03	Thu - Fri	Spot the Difference: Searching for Cosmic Explosions! **Ryan Cutter**
SS3.04	Thu - Fri	AGN-driven radio jets: physical constraints from VLBA and VLA observations in the COSMOS field **Ivan Delvecchio**
SS3.05	Thu - Fri	Hard X-ray properties of NuSTAR blazars **Niraj Dhital**
SS3.06	Thu - Fri	Multi-zone blazar modelling **Bruno Jiménez**
SS3.07	Thu - Fri	Repeated jets from the white dwarf in the symbiotic prototype Z Andromedae. **Augustin Skopal**
SS3.08	Thu - Fri	Knotty protostellar jets as a signature of episodic protostellar accretion? **Eduard Vorobyov**

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SS4.01	Thu - Fri	The importance of very accurate experimental log(gf)-values for the calculation of chemical abundances **Maria Teresa Belmonte**
SS4.02	Thu - Fri	New accurate atomic data for iron for astrophysics applications **Florence Concepcion Mairey**
SS4.03	Thu - Fri	Theoretical radiative and collisional data for neutral iron **Andrew Conroy**
SS4.04	Thu - Fri	The new generation of white dwarf models: can they help us identify gaps in our knowledge of hydrogen and helium spectral lines? **Elena Cukanovaite**
SS4.05	Thu - Fri	Rate coefficients for symmetric and non-symmetric ion-atom and atom-atom processes in stellar atmospheres **Milan S. Dimitrijević**
SS4.06	Thu - Fri	Categorising the level of uncertainty in electron-impact excitation and photoionisation rates of low-ionised stages of Fe-peak elements. **Luis Fernandez Menchero**
SS4.07	Thu - Fri	Building a New Semi-Empirical Stellar Library with Variable Abundance Patterns **Adam Knowles**
SS4.08	Thu - Fri	A collection of atomic data required for NLTE calculations. **Yeisson Osorio**
SS4.09	Thu - Fri	Relativistic R-matrix calculations for the photoionisation of Fe I and the electron-impact excitation of Fe II **Ryan Smyth**
SS4.10	Thu - Fri	Recent development of the Atomic Line List **Peter van Hoof**
SS4.11	Thu - Fri	Thermal dependency of VUV absorption cross section **Olivia Venot**
SS4.12	Thu - Fri	Computational Astrochemistry: H20 - H2 collisions **Michał Żółtowski**
SS5.01	Tue - Wed	Morphological characterization of interstellar dust analogs obtained in plasma **Ioana Cristina Gerber**
SS5.02	Tue - Wed	Diagnostics of He – C3H8 plasmas during the synthesis of interstellar carbon dust analogs **Bianca Cristiana Hodoroaba**
SS5.03	Tue - Wed	Fullerenes in space: from planetary nebulae to protoplanetary disks **Susana Iglesias-Groth**
SS5.04	Tue - Wed	Determining the formation routes of complex molecules formed by/during electron irradiation of multicomponent ice systems containing H2O, CO2 and NH3 **Rachel James**
SS5.05	Tue - Wed	Tracing the carbon chemistry around carbon-rich AGB stars with the VLA and ALMA **Denise Keller**
SS5.06	Tue - Wed	ALCHEMI: Pushing the limits of extragalactic chemistry **Sergio Martin**
SS5.07	Tue - Wed	Synthesizing the basic PAH unit **Nigel Mason**
SS5.08	Tue - Wed	Reversible phase change observed in astrochemical ethanethiol ices **Nigel Mason**
SS5.09	Tue - Wed	Identification of a unique VUV photoabsorption band of carbonic acid **Nigel Mason**
SS5.10	Tue - Wed	Chemical complexity around the Intermediate-Mass protostar CepE-mm. **Juan Ospina-Zamudio**

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SS5.11	Tue - Wed	Complex Organic molecules from prestellar core to protostar; the case of L1544, HH212 and IRAS 4A **Dipen Sahu**
SS5.12	Tue - Wed	Catalytic reactions of methanol on crystalline silicate surfaces: experimental studies. **Peter Sarre**
SS5.13	Tue - Wed	Complex cyanides as chemical clocks for high-mass star formation **Floris van der Tak**
SS5.14	Tue - Wed	Mapping diffuse interstellar bands in galaxies beyond the local group with MUSE **Martin Wendt**
SS5.15	Tue - Wed	Small scale structures in Diffuse Interstellar Bands seen via MUSE 3D spectroscopy toward globular clusters. **Martin Wendt**
SS6.01	Thu - Fri	Luminous Blue Variables as dust factories with ALMA **Claudia Agliozzo**
SS6.02	Thu - Fri	A twist in the tail: extreme anisotropic dust production revealed in a new colliding-wind wolf-rayet pinwheel **Joseph Callingham**
SS6.03	Thu - Fri	Galactic Supernova Remnants in the Far-Infrared **Hannah Chawner**
SS6.04	Thu - Fri	High-Resolution Observations of Dust in SN 1987A **Phil Cigan**
SS6.05	Thu - Fri	In search of the fundamentals of dust formation around evolved stars with the Origins Space Telescope **Elvire De Beck**
SS6.06	Thu - Fri	Large grains in the Tarantula Nebula **Guido De Marchi**
SS6.07	Thu - Fri	Herschel Observations of Molecular Emission Lines in Low- and Intermediate-Mass Evolved Stars **Pedro Garcia-Lario**
SS6.08	Thu - Fri	Phosphorus production in supernovae and meteorites: a path to life on Earth? **Jane Greaves**
SS6.09	Thu - Fri	Luminosities and mass-loss rates of AGB stars and RSGs in the Magellanic Clouds **Martin Groenewegen**
SS6.10	Thu - Fri	Which low- and intermediate-mass stars produce dust? When? And why? **Iain McDonald**
SS6.11	Thu - Fri	The dust mass in the O-rich supernova remnant SMC 1E0102.2-7219 from modelling its red-blue emission line asymmetries **Maria Niculescu-Duvaz**
SS6.12	Thu - Fri	Spectroscopic variability of IRAS22272+5435 **Karlis Pukitis**
SS6.13	Thu - Fri	Mass loss and winds in Red Giant and AGB stars: constraints from HST and VLTI observations **Gioia Rau**
SS6.14	Thu - Fri	Evolved star winds, clumps and dust evolution: physical conditions traced by masers **Anita Richards**
SS6.15	Thu - Fri	Hydrodynamic Simulations of Dust Destruction in Supernova Remnants **Franziska Schmidt**
SS6.16	Thu - Fri	Dust formation via disruption of circumstellar clouds **Mark Walker**
SS6.17	Thu - Fri	Variable dust emission by WC type Wolf-Rayet stars observed in the NEOWISE-R survey **Peredur Williams**

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SS7.01	Thu - Fri	Europlanet Diversity Working Group commitment to promoting equality at EPSC **Jacqueline Campbell**
SS8.01	Tue - Wed	Here, There and Everywhere: Across the Universe with the Beatles **Viviana Ambrosi**
SS8.02	Tue - Wed	Strategic outreach and public engagement in a university context **Nicolas Bonne**
SS8.03	Tue - Wed	Blogging about astrophysics: insights from the Astrobites experience **Nora Elisa Chisari**
SS8.04	Tue - Wed	Putting in contact with Astrphysics **Paola Giorgini**
SS8.05	Tue - Wed	Bringing the Public to Astronomy under Northumberland's Darkest Skies **Hayden Goodfellow**
SS8.06	Tue - Wed	The National Schools' Observatory - bringing Space into the Classroom **Stacey Habergham-Mawson**
SS8.07	Tue - Wed	Astronomy summer camp Beli Brezi, Bulgaria - building the astronomical community of the future **Valentin Ivanov**
SS8.08	Tue - Wed	The International Olympiad on Astronomy and Astrophysics **Sandor Kruk**
SS8.09	Tue - Wed	Inquiry-Based Astronomy Projects with the National Schools' Observatory **Fraser Lewis**
SS8.10	Tue - Wed	The Expanding Universe of Astronomy on Tap **Rachael Livermore**
SS8.11	Tue - Wed	Corporate Partnerships to obtain resources for astronomy outreach **Marja Seidel**
SS8.12	Tue - Wed	Keele Observatory **Jacco van Loon**
SS8.13	Tue - Wed	Blackpool Pier (Physics: Inspire, Engage, Research)- working with low science capital communities in Lancashire, UK **Robert Walsh**
SS8.14	Tue - Wed	Shine: combining science, art and music to bring light to new audiences **Anne-Marie Weijmans**
SS8.15	Tue - Wed	Science on Buses **Stephen Wilkins**
SS10.01	Thu - Fri	The evolution of galaxy stellar mass functions at z = 6-9 in the Hubble Frontier Fields **Rachana Bhatawdekar**
SS10.02	Thu - Fri	On the AGN activity of Ly-alpha emitters at high redshift **Joao Calhau**
SS10.03	Thu - Fri	The MUSE Hubble Ultra Deep Field Survey: The Faint-End of the Lya Luminosity Function and Implications for Reionisation **Alyssa Drake**
SS10.04	Thu - Fri	Insights for the Epoch of Reionisation from low-redshift Extreme Emission Line Sources **Ciaran Fairhurst**
SS10.05	Thu - Fri	The escape fraction in a large sample of faint z~3 Lyman alpha emitters **Thomas Fletcher**
SS10.06	Thu - Fri	The nature of JWST detected AGNs **Andrew Griffin**
SS10.07	Thu - Fri	The Contribution of Faint Galaxies to Reionization: Cross-correlating High Redshift CIV Absorbers with the Lyman Alpha Forest **Romain Meyer**

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SS10.08	Thu - Fri	The Effects of Rotation on observable signatures of Population-III stars and their Supernovae. **Laura Murphy**
SS10.09	Thu - Fri	Identifying local compact galaxies with SDSS and UKIDSS **Raffaele Rani**
SS10.10	Thu - Fri	Slicing COSMOS with SC4K: the evolution of typical Lya emitters and the Lya escape fraction from z~2 to z~6 **Sergio Santos**
SS10.11	Thu - Fri	The Ionizing Photon Production Efficiency of Extreme Emission Line Galaxies at z~2 **Mengtao Tang**
SS10.12	Thu - Fri	Mass-Downsizing in the early Universe from VUDS galaxies **Romain Thomas**
SS10.13	Thu - Fri	Results from a Search for Lyman-alpha and UV Metal Lines in Lensed and High-Redshift Galaxies **Adi Zitrin**
SS11.01	Tue - Wed	Double Maser Super Burst **Ross Burns**
SS11.02	Tue - Wed	Study on Ionospheric Tomography and Ionospheric Correction in Radio Astronomy and Radar Astronomy **LANG FENG**
SS11.03	Tue - Wed	VLBI with the Square Kilometre Array **Cristina Garcia Miro**
SS11.04	Tue - Wed	Come and go: the short visit of the gamma-ray binary PSR J2032+4127 **Javier Moldon**
SS11.06	Tue - Wed	Possibilities of VIRAC Small Baseline Interferometer for Exploring of Maser Sources **Ivar Shmeld**
SS11.07	Tue - Wed	Science opportunities and recent results for small and flexible VLBI arrays **Tiziana Venturi**
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