

UMnyele weZulu

EDITION 3: 8 AUGUST 2024 XXXII  GENERAL ASSEMBLY CAPE TOWN, SOUTH AFRICA

Towards Astro Foundation Models

Astronomy is embracing AI

By Ashish Mahabal and Ana I. Gomez - Pg 10

SKAO Day - Pg 5

SKA Observatory: Exploring a universe of possibilities

Women in Astronomy Working Group

Empowering Equity and Welcoming Diversity in Astronomy - Pg 7

[Download our Cape Town Food and Restaurant Guide - Pg 16](#)



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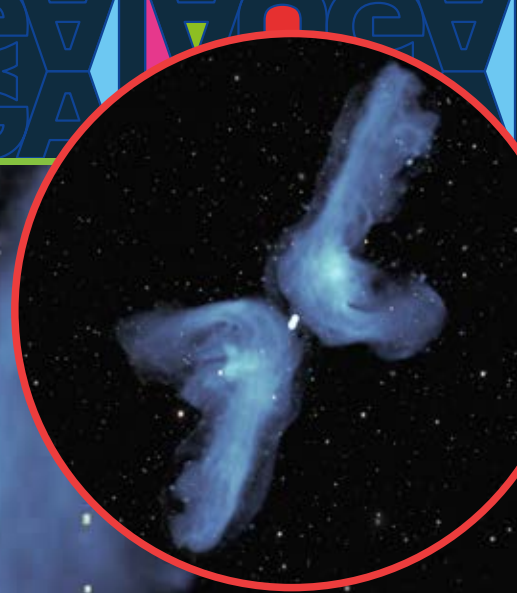
AfAS
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Table of Contents

This is the 3rd issue of UmnyeLe weZulu, the IAU General Assembly 2024's daily newspaper. The event is humming with activity as astronomers and visitors from all over the world converge on the Cape Town International Conference Centre. If you are new to the Mother City (as Cape Town is known to the locals) why not check out some of the sites, such as the Noon Gun or some of the many great restaurants. Don't forget today's Invited Discourse with Dr Bernie Fanaroff and Dr Mpati Ramatsoku at 17:30.

- 03 An invitation to the OYA meeting
- 04 Coordinating astrophysics on the ground and in space
- 05 SKA Observatory: Exploring a universe of possibilities
- 07 Women in Astronomy Working Group
- 09 2024 Astronomy ODE Prizewinners
- 10 Towards astro foundation models
- 11 Outreach activity at the Iziko Planetarium
- 12 Division E Days: Sun & heliosphere
- 14 Cape Town's Noon Gun
- 15 Division F Days: Planetary systems and astrobiology
- 16 Eating out in Cape Town
- 17 Question of the day
- 18 Pop-up market



Upcoming Events

- Invited Discourse:
Dr Bernie Fanaroff and
Dr Mpati Ramatsoku
08 Aug
- Cosmic Echoes art exhibition
06 to 15 Aug
- CSIRO Australia Telescope
National Facility: ATNF Data
Archives
08 Aug
- IAUS 390: A multi-point view of
the Sun
08 Aug
- IAU Side-Event: Event Horizon
Telescope (EHT) Science
Session
08 Aug

Image of x-shaped galaxy PKS 2014-55, located 800 million light years from Earth, obtained by MeerKAT. Image: NRF-SAAO



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XXXII IAU GENERAL ASSEMBLY

CAPE TOWN, SOUTH AFRICA, 2024

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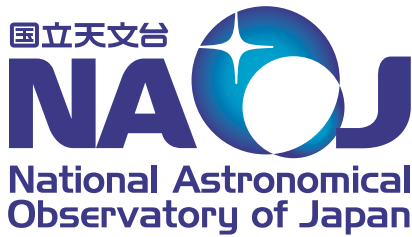
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An Invitation to the OYA Meeting

Itziar Aretxaga, ISYA Director



Over its 57 years of existence, there have been 44 ISYA organized in 27 countries

promoters and lecturers of new ISYAs.

OYA is hosting an open Meeting on the 8th of August). We invite participation from all IAU members to brainstorm on the most effective ways to impact young astronomers' careers in the developing world. There is a bunch a selected talks on the difficulties and successful professional careers of astronomers in Africa, Latin America and Asia, and the leaders of specialized graduate schools that are linked in philosophy to ISYAs.

ISYAs offer within their programs a set of workshops on soft skills for young astronomers. On the final session of the Meeting, OYA-3, we will offer three condensed pills that gather the flavor of our workshops followed by discussion with the attendees to the session. Graduate students from any country attending the

General Assembly are specially invited to this session, as these are thoughts from OYA specially prepared for them. These short talks followed by discussions will focus on mental hygiene for a professional researcher, job/PhD school search preparation and Work Ethics. Dozens of professional astronomers have contributed to these thoughts for early career scientists based on their own experience on developing a career in Astronomy.

You are all welcome to participate in the meeting.

The Office for Young Astronomers (OYA) has as its main program the International Schools for Young Astronomers (ISYA), started in 1967 by the IAU, and nowadays also co-sponsored by the Norwegian Academy of Science and Letters. It organizes three-week intensive graduate schools for students have

less opportunity to be directly exposed to the full extent of up-to-date astrophysics. The program targets mainly, but not exclusively, students from astronomically developing countries. ISYA offers students coherent lectures that cover the basic concepts of selected fields of astronomy and astrophysics, the opportunity to carry out and analyze multi-wavelength data, engage in group

projects, workshops on career development and a network of fellow students to grow with into the next generation of leaders in their countries.

Schools usually have 30-50 students from the host country and from countries in the same IAU region. They are aided by a team of 10-15 lecturers which are world-wide experts on their topics. Over time, ISYAs have hosted over 1500 students and 400 lecturers. Many prominent IAU members were students of the program, and time has come when alumni are enthusiastic



Background rows: attending students from 14 African nations to the 44th ISYA (2023) in Cape Town. Front row: three alumni from schools in 2005, 2012 and 2017 that served as local director, lecturers and instructors in 44th ISYA. Image: OYA

Coordinating Astrophysics on the Ground and in Space

By Roger Davies



Many major national and international projects are facing critical choices

Venue Meeting Room 2.41 - 2.43

Future Space Missions 10:30, 13 Aug

Future Ground-Based Facilities 13:30, 13 Aug

Future Far IR & Millimetre Facilities 15:30, 13 Aug

Co-ordination of Transient Follow-up 10:30, 14 Aug

The Working Group on Global Coordination of Ground and Space Astrophysics provides a forum for updating participants on the status of many of the forthcoming space and ground based projects at each General Assembly. As is often the case, many major national and international projects are facing critical choices. Which missions and telescopes should be launched or continued? Which instruments or capabilities are essential, and which might be discontinued? How can time-critical follow-up of transient events be optimally arranged?

The Working Group is holding four sessions during the General Assembly, on 13 and 14 August. The topics are Future Space Missions (10.30, 13/8), Future Ground-



The NASA Nancy Grace Roman Space Telescope due to be launched in 2026. Image: NASA

Based Facilities (13.30, 13/8), Future Far IR and Millimetre Facilities (15.30, 13/8) and Co-ordination of Transient Follow-up (10.30, 14/8). The programme has attracted contributions from the leading project and agency staff and includes significant time for discussion and for questions from the audience.

The space session includes contributions from NASA, ESA, ISAS/JAXA, CMS & ISRO and the ground based session covers both European and US-led ELT projects as well as SKA & ngVLA.

The session on future far IR and millimetre facilities follows up on the Kavli Workshop on the same subject held in Pasadena in March this year and the transient session will explore the follow-up of LIGO-Virgo-Kagra and planning for Rubin operations.

The sessions will be held in Meeting Room 2.41 - 2.43 and the full programme can be found [HERE](#).

Top: Roger L Davies

Image: Mike Peel www.mikepeel.net



The ESO 39m Extremely Large Telescope under construction at Armazones, Chile. Image: E. Garcés/ESO. Ack.: N. Dubost

SKA Observatory: exploring a universe of possibilities

Full-day programme of speakers reveals latest updates on telescope construction, preparations for science, job opportunities and our sustainability commitments



Venue Nerina and Protea, CTICC 2

Date 10:30 AM to 5:15 PM, Friday 9 August

Coinciding with Women’s Day in South Africa and International Day of the World’s Indigenous Peoples, the SKAO’s **day-long side event** will reveal the latest construction progress at our telescope sites in Australia and South Africa, and showcase how we are building partnerships with local and Indigenous communities to create long-term benefits for our local neighbours.

We will detail how the science community can already get involved as we prepare for science verification and early operations. This includes information on

science timelines, what users can expect in areas such as telescope capabilities and access, the current tools available for the community, and updates on the development of the SKA Regional Centre network (SRCNet) where users will access observatory data products.

This packed day of talks and panel discussions will also encompass the current preparations for SKA science including an update on the Science Data Challenges, sustainability as a foundation for our activities, and opportunities to work for the SKAO.

The full schedule is [AVAILABLE HERE](#).

(Top) MeerKAT antenna array. Image NRF-SARAO

Invited Discourse Speakers



Dr Bernie Fanaroff (SKA)

“Innovating at the Periphery: the Development of SKA and MeerKAT”

with an additional 10-min talk by Dr Mpathi Ramatsoku (Rhodes University)

It is Discourse time today at the IAU, exploring the development of SKA and MeerKAT with Dr Bernie Fanaroff and Dr Mpati Ramatsoku

**17:15 - 18:30
CTICC Audi 1**



Pontsho Maruping
SARAO managing director



Sarah Pearce
Low telescope director



Tracy Cheetham
Mid construction director



Cathryn Trott
Low chief operations scientist



Jennylyn Hamlett
Aboriginal liaison officer

SKAO day
Friday 9 August
Nerina & Protea (CTICC2)
10:30am - 5:15pm



Nomfundo Makhubo
SARAO stakeholder manager



Shari Breen
Head of science operations



Sharmila Goedhart
Mid head of science operations



Nichol Cunningham
Operations scientist



Rosie Bolton
Head of data operations



Wendy Williams
Project scientist



Danielle Fenech
Software product manager



Nontobeko Mnyandu
Project manager



Naomi McClure-Griffiths
Science advisory chair

Women in Astronomy Working Group

Dr Mamta Pommier



Empowering Equity and Welcoming Diversity in Astronomy

Venue Meeting Room 2.44 - 2.46

WG3-1 15:30-17:00 Tuesday, 13 August

WG3-2 10:30-14:45 Wednesday, 14 August

WG3-3 14:45-17:00 Wednesday, 14 August

Among the most anticipated sessions at the XXXIInd IAU General Assembly in Cape Town is Working Group 3: Women in Astronomy (WiA WG), which is focused on the advancement of gender equity and promotion of inclusivity within the field. This meeting will provide a dynamic platform for discussion, inspiration, and actionable steps for further progress.

Introduction to Working Group 3

The Women in Astronomy Working Group is committed to addressing gender disparities and promoting a safe and inclusive working environment for all astronomers. Our mission is to support initiatives that enhance the participation and advancement of women in astronomy, providing a crucial platform for open dialogue and advocacy.

Agenda for the GA2024 Meeting

The WiA WG will host a series of interactive sessions and activities aimed at creating awareness, identifying actions, and engaging participants. Key events include:

- **Opening Remarks and Networking Luncheon**

The session will begin with opening remarks from Prof. Debra Elmegreen, President of the IAU, whose leadership exemplifies the positive impact of women leadership in astronomy. A welcome note from Mamta Pommier, Chair of IAU Women in Astronomy WG will follow.

- **Interactive Talk Session and Panel Discussion**

Several talks will focus on raising awareness about sustainability and fostering discussions on ongoing efforts by funding agencies, institutions, and astronomy projects to counter the 'leaky pipeline

effect' and improve career opportunities for women in astronomy. These discussions will also cover training and skill-building, mentorship, and initiatives aimed at achieving gender balance in the field.

- **Survey on Gender Equity in Astronomy**

We encourage you to participate in the Gender Equity Survey organized by the IAU Women in Astronomy Working Group. This survey is crucial for understanding global efforts to ensure equal

IAU Side-Event

Event Horizon Telescope (EHT) Science Session

8 August, 14:00 – 17:00

Venue: Nerina & Protea CTICC 2

<https://astronomy2024.org/eht-session/>

First image of the black hole at the centre of the Milky Way. Image: EHT Collaboration

effect' and improve career opportunities for women in astronomy. These discussions will also cover training and skill-building, mentorship, and initiatives aimed at achieving gender balance in the field.

- **Survey on Gender Equity in Astronomy**

We encourage you to participate in the Gender Equity Survey organized by the IAU Women in Astronomy Working Group. This survey is crucial for understanding global efforts to ensure equal opportunities in astronomy and will help us implement best practices to enhance diversity and inclusion in the field.

- **Announcement of the STEM Ambassador Award**

I am pleased to launch the 'STEM Ambassador Recognition' award. This inaugural award will recognise individuals who have made significant, consistent contributions to promoting gender balance in astronomy. We will honor at least five advocates from diverse backgrounds for their impactful efforts in this direction.

Call to Action

We encourage all IAU General Assembly 2024 participants and colleagues from South Africa to attend the WiA WG sessions, engage in the discussions, join our network, and contribute to our collective efforts to fix the 'leaky pipeline effect' and build a more inclusive

and gender-balanced community in astronomy. Your engagement is most crucial for advancing gender equity in our field.

Join us in making this a remarkable event and help shape a future where diversity and inclusion are central to all the scientific projects!

Dr Mamta Pommier serves as the Chair of the IAU Women in Astronomy Working Group and is a Senior Lecturer in Physics and Astronomy at Lyon University.

Did You Know?

The port city of Cape Town, home to about five million residents, is voted #2 Best City for 2024

[**CLICK HERE**](#) for more info



2024 Astronomy ODE Prizewinners

An Ode to the People Making "Astronomy for All" a Reality

Laura Hiscott



At the opening ceremony on Tuesday, IAU Past President Ewine van Dishoeck, presented certificates to the winners of the 2024 Astronomy Outreach, Development and Education (ODE) Prizes. Yesterday, we heard first-hand from the recipients about the outstanding work they are doing, bringing opportunities to engage with astronomy and even pursue it as a career to a wider audience.

The winners of the 2024 ODE Education Prize, Bonaventure Okere and Linda Strubbe, spoke about the Pan-African School for Emerging Astronomers (PASEA), which was founded in 2012 at the IAU XXVIII General Assembly. Bonaventure led the establishment of PASEA with a vision of leveraging Africa's world-class astronomy facilities to improve STEM education across Africa. Building on this, Linda has developed high-quality, inquiry-based educational experiences for the programme, which has now trained around 300 students in 18 African countries.

Saran Poshyachinda, winner of the 2024 ODE Outreach Prize, spoke about his work establishing the National Astronomical Research Institute of Thailand (NARIT). Although he had a passion for astronomy since childhood, Saran chose to become a chemist because there was no adequate astronomy institute in Thailand when he was growing up. This drove him to found NARIT and its outreach team, which now reaches over 700 000 people in the country every year – more than any other research organisation in Thailand.

Four early-career scientists who co-lead the Central

American Caribbean Bridge in Astrophysics (Cenca Bridge) project spoke about the initiative, which won the 2024 ODE Development Prize. Cenca Bridge is a mentorship and research internship programme that enables aspiring astrophysicists across Central America and the Caribbean to engage in astronomical research. We heard from all four of the co-leaders: Antonio Porras Valverde, Gloria Fonseca Alvarez, Valeria Hurtado, and Yahira Mendoza Moncada.



(Top) Saran Poshyachinda and Ewine van Dishoeck

(Above left) Linda Strubbe

(Above right) Bonaventure Okere

(Bottom) Cenca Bridge

Towards Astro Foundation Models

Ashish Mahabal and Ana I. Gomez de Castro

Astronomy is embracing AI

As the world moves towards more advanced AI models including foundation models, astronomy is starting to catch up with applications in all subfields e.g. Solar System, Stellar variability, exoplanets, extragalactic science, and cosmology. Foundation models are large-scale machine learning models trained on vast datasets, capable of performing a wide range of tasks. In astronomy, these models have the potential to accelerate discoveries by automating data analysis, identifying patterns, and making predictions.

One example is AstroCLIP, a cross-modal, self-supervised model that creates a shared embedding space for multi-band imaging and optical spectra of galaxies. By utilizing a large repository of observational data, AstroCLIP can perform tasks such as semantic similarity search, photo-z estimation, galaxy property prediction, and morphology classification. This versatility is achieved by embedding galaxy images and spectra into a shared latent space, which can then be used for various downstream tasks without additional fine-tuning.

Another significant development is NASA's Helio foundation model, aimed at advancing heliophysics research. The Helio model is trained on an extensive range of solar and space weather data, with the future goal of predicting solar flares, coronal mass ejections, and other solar activities that impact space weather. Such predictive capability will be crucial for safeguarding satellites, communication systems, and power grids from solar-induced disruptions.

Looking ahead, the future of AI in astronomy is promising. Foundation models will play an essential role in combining diverse datasets, such as images, spectra, and time-series data, to provide comprehensive insights into various astronomical phenomena. Many time series foundation models have emerged recently, almost all

more suited to regular data and not for the sparse and irregular astronomy data, but advances there are also on the cards. The interpretability of foundation models and their ability to apply zero-shot learning—making predictions on entirely new types of data—will be critical for advancing our knowledge. By keeping the models interpretable, we can ensure that the future is bright.



Ana Gomez de Castro is the coming president of Division B: Facilities, Technologies and Data Science. She is full professor at the Universidad Complutense de Madrid and director of the Research Group on Space Astronomy and Data Mining. She is also

the PI of the ERC-AdG ENIMUS designed to investigate the enantiomeric excess in the Solar System.



Ashish Mahabal is the outgoing president of the IAU B3 commission on Astroinformatics and Astrostatistics. He leads the ML for the Zwicky Transient Facility, and as the deputy director of Caltech's Center for Data

Driven Discovery he is also involved in data science projects in disciplines other than astronomy.

Outreach Activity at the Iziko Planetarium

Marcelina Kinyumu

Inspiring young minds

As part of the IAU General Assembly's outreach activities, delegates from the IAU visited the Iziko Planetarium on Wednesday 7 August. This visit provided a wonderful opportunity for the public to engage with astronomy in an immersive and guided environment. The audience for this event was particularly young, ranging from three to five years old, which made the experience all the more special.

One of the major highlights of the day was the Puppet Planet Show. This creatively crafted presentation introduced the concept

of exoplanets to the eager young learners. Through storytelling and engaging visuals, the show sparked curiosity and a desire for exploration in these budding astronomers. By prompting them to think about worlds beyond Earth, the presenters aimed to instil a sense of wonder about the Universe and inspire an early interest in astronomy and the search for life beyond our planet.



Other planned engagements at the planetarium will take place on Thursday 08, Monday 12 and Tuesday 13.

(Top) Puppet Planet Show



IAUS 390: Plenary Talks

A Multi-Point view of the Sun: Advances in Solar Observations and in Space Weather Understanding



Beyond Flatland: A Star of Many Dimensions
Dr. Sarah Gibson (NCAR/HAO)

IAUS 390 Plenary Talks

08:30-10:00

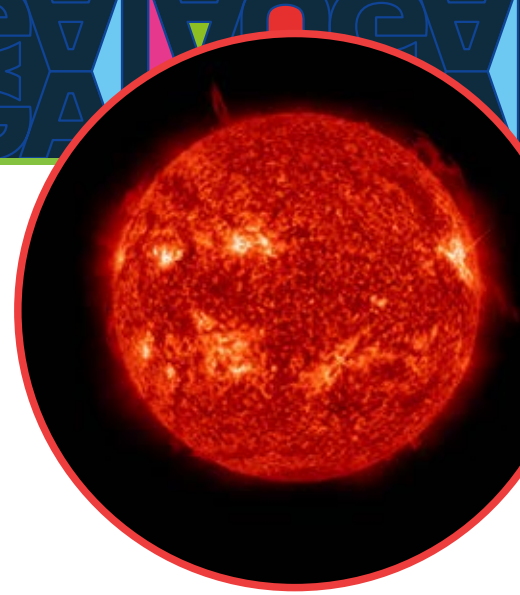
**Thursday, 8 August, 2024,
CTICC Audi 1**



Division E Days

Multi-wavelength Heliophysics from Space and the Ground

Sun and Heliosphere



Above Image: NASA

Division E - Sun & Heliosphere Meeting Room 2.44 - 2.46

- Division E-1** 10:30-12:00 Friday, 9 August, 2024
- Division E-2** 13:30-15:00 Friday, 9 August, 2024
- Division E-3** 10:30-12:00 Monday, 12 August, 2024
- Division E-4** 13:30-15:00 Monday, 12 August, 2024
- Division E-5** 15:30-17:00 Monday, 12 August, 2024

The research covered by Division E includes the study of the Sun, its variability, activity, and dynamics, as well as its impact on the Earth and other bodies within the heliosphere. Earth's proximity to the Sun enables detailed investigations of its structure, the physical processes operating in its interior and atmosphere, as well as the radiation and the momentum and energy that propagate outward, into the heliosphere. Dynamical phenomena include waves, flares, coronal mass ejections, shock fronts, transient events propagation, and the acceleration of particles in the interplanetary medium.

Our Division E Workshop, "Multi-wavelength Heliophysics from Space and the Ground", finds solar and heliophysics research in a very advantageous position to address key questions on the above topics. The study of the Sun and its region of influence, the heliosphere, benefits from an unprecedented number of space missions and cutting-edge ground-based observatories providing multi-wavelength and multi-point measurements that span from the photosphere, chromosphere, and corona to the heliospheric in situ plasma, particles, and magnetic field observed from several vantage points at various heliocentric distances.

The Workshop is organized in four sessions. Three of these sessions are devoted to the main scientific

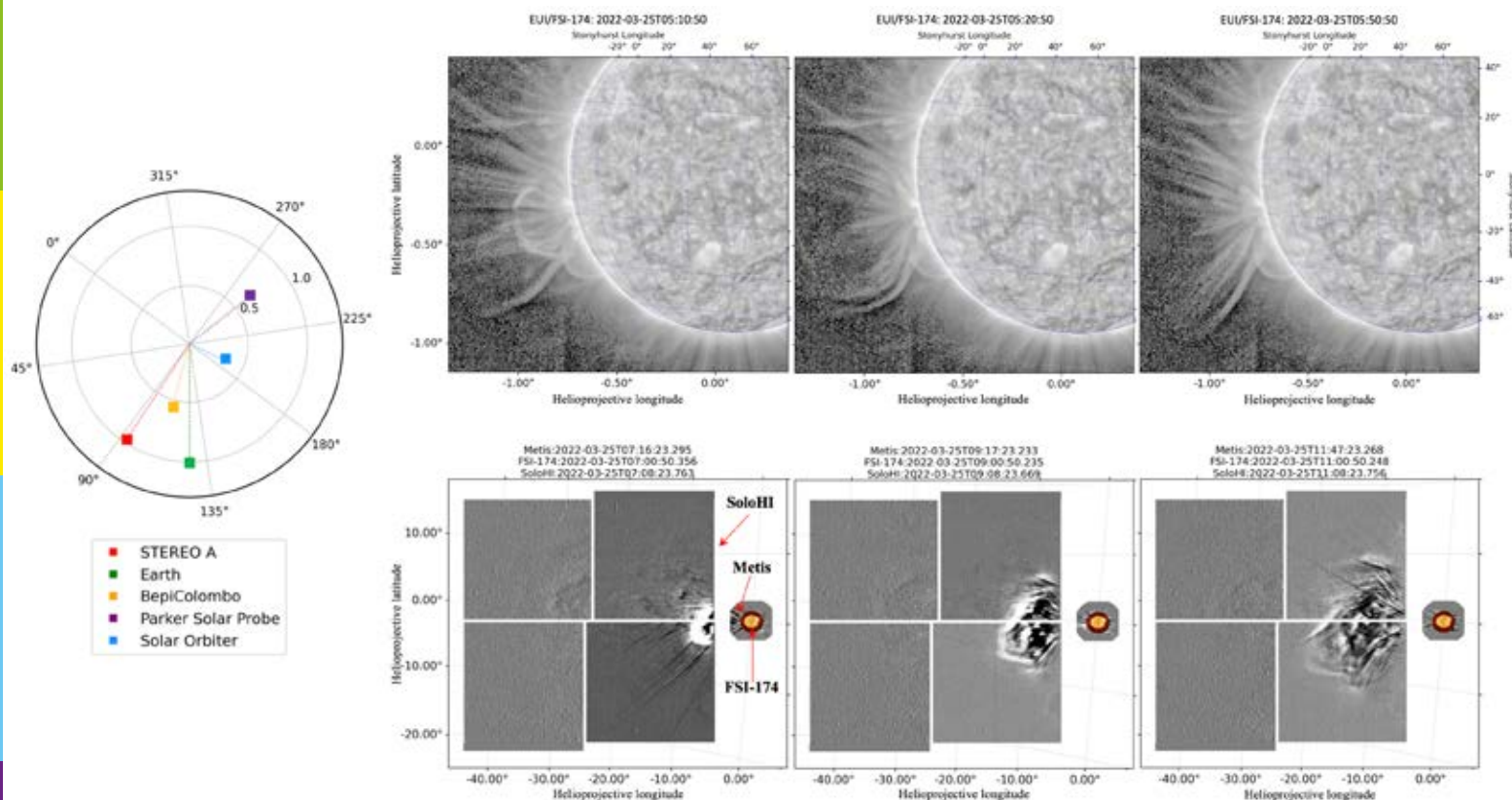
pillars of Division E: Solar Radiation and Structure, Solar Active Phenomena, and Solar Impact throughout the Heliosphere. Three invited lectures per session will highlight recent progress in these three broad fields, encompassing advances in our knowledge of solar small-scale magnetic fields and their effect on convection and activity, future directions in modeling total and spectral solar irradiance, the dynamics of small-scale atmospheric structures, observations, modeling and simulations of solar magnetic phenomena, origin of coronal mass ejections (CMEs) and their impact on the solar atmosphere, large-scale structures in the heliosphere and their space weather impact, as well as the dynamics of the solar wind and the heliospheric magnetic field. A relevant number of contributions will accompany these invited reviews.

Catch insightful shows with

Radio Astro

pioneering project stream
10 AM until 6 PM during the
conference, including
Saturday, 10 August 2024.





We will have the pleasure to dedicate a fourth session to the talks of five young solar physicists, winners of the IAU and IAU “at-large” PhD Prizes, as well as Honorable IAU Mentions, in 2022 and 2023.

Join us in this trip from inside the Sun to the heliosphere!

Scientific Organizing Committee: Cristina H. Mandrini (Co-chair), Toshifumi Shimizu (Co-chair), Timothy S. Bastian, Mingde Ding, Robertus Erdelyi, Ilaria Ermolli, Claire Foullon, Manolis K. Georgoulis, Sarah Gibson, Irina N. Kitiashvili, Heidi H. Korhonen, Alexander Nindos, Durgesh Tripathi.

(Above) On 25 March 2022 at 05:00 UTC multiple spacecraft observed a CME originating from an active region (AR) numbered as 12974. Solar Orbiter followed the CME during its entire evolution from the low corona to large heliocentric

distances (> 55 solar radii) by combining three remote sensing instruments: the Full Sun Imager (FSI-174), the coronagraph (Metis), and the Solar Orbiter/Heliospheric Imager (SoloHI).

Left: Relative position of the all spacecraft observing the CME at 05:00 UTC. The Solar-Terrestrial Relations Observatory-A (STEREO-A, red square) and SoLO (blue square) are near quadrature. Parker Solar Probe and BepiColombo are also shown.

Right: Selection of frames showing the CME evolution as observed by SoLO/FSI-174 (top, initial phases) and by combining SoLO/FSI-174, Metis, and SoloHI (bottom, interplanetary evolution).

Credit: Liberatore et al. (07/12/2023), Solar Orbiter nugget #23. Link to full article [HERE](#)

Did You Know?

The **Boulders Beach** in Cape Town is home to thousands of penguins.

IAU GA 2024 is on X platform (formerly Twitter) as @astronomy2024. Common post tags for the event are #Astronomy2024, #AfricaLookUp, #Astronomy, and #IAUGA2024.

Did You Know?

You can sip coffee on weekdays (9:00-18:00) during the IAU GA 2024 and network with more than 40 exhibitors at the award-winning Cape Town International Convention Center (equipped with world-class visitor facilities including free wifi and even a parents room): SKAO, ICRAR, NASA, ESA, and many more. [Click here](#) to see all of our sponsors and exhibitors.

Cape Town's Noon Gun

Cape Town is a boom town in more ways than one



Long ago, seafarers faced a big problem: figuring out their exact location while sailing the vast oceans. To solve this “Longitude” puzzle, they needed precise timekeeping. Enter the Noon Gun! In Cape Town, a cannon was fired at a specific time so sailors could reset their clocks and navigate accurately. Initially, untrained people fired the cannon, leading to some timing issues. To fix this, the Royal Observatory, Cape of Good Hope (now the NRF South African Astronomical Observatory), was established, becoming the first permanent scientific institution in the Southern Hemisphere. Today, the Noon Gun is the oldest continuous time signal in the world.

Fun Fact

If you're outdoors in Cape Town at noon, you might hear a “big bang”—don't worry, it's just the Noon Gun firing! This daily tradition started in 1902 and has become a beloved local custom. So, whether you're a history buff or just love a big bang, the Noon Gun is a unique piece of Cape Town's maritime heritage.

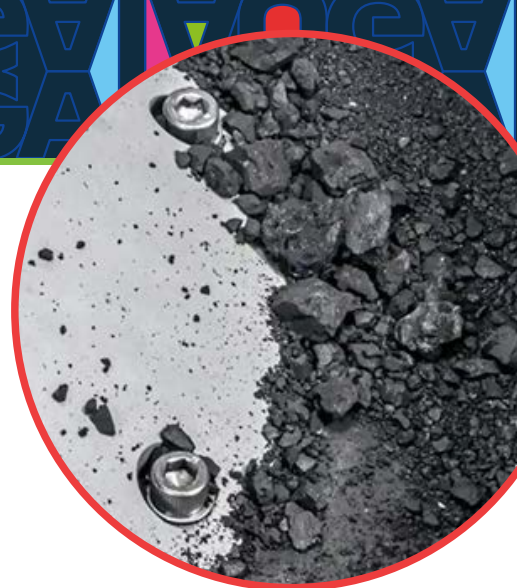
Above: Aerial view of Cape Town. Image: South African Tourism, Wikimedia. Below: Cape Town's Noon Gun firing. Image: Graham Richter, Wikimedia



Division F Days

From Interplanetary Dust to Astrobiology

Planetary Systems and Astrobiology



Division E - Planetary Systems and Astrobiology
Meeting Room 1.40

Division F-1 10:30-12:00 Friday, 9 August, 2024

Division F-2 13:30-15:00 Friday, 9 August, 2024

Division F-3 10:30-12:00 Monday, 12 August, 2024

Division F-4 13:30-15:00 Monday, 12 August, 2024

Division F-5 15:30-17:00 Monday, 12 August, 2024

On Friday 9 and Monday 12 August, the Division F Days meeting will be held. Division F includes four Commissions, one Cross Division Commission, and Working Groups focused on the study of solar and extrasolar planetary systems, their constituents and astrobiology. The activities of the Division and the Commissions of the last three years will be presented and discussed as well as the science highlights. This includes observational, theoretical and experimental studies of a large variety of topics: exoplanets, planetary systems, interplanetary dust, planets, asteroids, comets, transneptunian objects, satellites, meteors, meteorites, as well as the interdisciplinary astrobiology field.

A large number of abstracts has been received. The final

programme includes a total of 38 oral presentations and 30 posters. Six presentations are invited talks by Patrick Michel on “Recent results of NEO space missions and perspectives” ; Athena Coustenis on “Exploration of habitable worlds in the solar system”; Shogo Tachibana on “Evolution of Carbonaceous Asteroids as a Factory of Prebiotic Molecule”, Rafael Luque on “The demographics of small transiting exoplanets” and the two PhD Prizes by Malena Rice on “A Dynamical Synthesis of Planetary Systems” and by Megan Weiner Mansfield on “Potential detections of M-dwarf rocky planet atmospheres and a trend in atmosphere occurrence” for the best 2022 and 2023 PhD theses. On the first day, a presentation by Jean-Luc Margot on “Proposed Follow-up to IAU Resolution B5 (2006) “Definition of a Planet in the Solar System” will open the discussion on a possible future resolution to the definition of a planet.

(Above) The analyzed samples of Ryugu and Bennu brought back from Hayabusa2 (JAXA) and OSIRIS-REx (NASA) missions contain organic matter older than Solar System. Credit: NASA

CSIRO Australia Telescope National Facility

We are hosting special hands-on sessions, please come see us at the CSIRO booth.

ATNF Data Archives: Ask Me Anything

Have questions about our data archives and what is available for astronomers? Learn how to access the data from our telescopes, including publicly available science-ready data from the ASKAP radio telescope.

TODAY Thursday 8 Aug 3 PM to 5 PM



CSIRO's ASKAP radio telescope under the Milky Way © CSIRO/A. Cherney.

Eating out in Cape Town

Discover Cape Town: It's Aperitivo O'Clock!



As the winter sun sets over the Cape Town landscape, the city comes alive with the allure of aperitivo hours. Nestled in the bustling city centre, a myriad of chic eateries and cozy wine bars invite you to unwind with crafted mocktails, cocktails and small bites. Here are the **top five** restaurants to visit for this delightful tradition:

Leo's Wine Bar

Max Bagels by day, Leo's by night. Nestled in the bustling heart of Bree Street, Leo's offers a carefully curated selection of local wines from small, specialised producers. Their menu features an array of delicious small bites, including artisanal cheese platters, charcuterie boards, and gourmet bruschetta, perfect for pairing with their extensive wine list. Keep an eye out for food pop-ups on Wednesdays! IAU-GA 2024 delegates can enjoy a 10% discount off their bill when presenting their conference tags.

Scala

Located on the charming Heritage Square, Scala offers a relaxed yet vibrant atmosphere. Half price wines, cocktails and mocktails paired with a budget-friendly cicchetti menu make aperitivo hour at Scala an irresistible opportunity to savour the flavours of Cape Town without breaking the bank. IAU-GA 2024 delegates can enjoy a 10% discount off their food (drinks excl.) when presenting their conference tags.

Aperitif

The name says it all. This understated and elegant establishment on Bree Street is renowned for its delightful aperitivo offerings. With craft cocktails, delicious small bites and wines from local small scale wineries, Aperitif promises a delightful start to your evening. We recommend trying the Berry Rooibos Spritz for a South African twist on a classic spritz.

Arthur's Mini Super

A vibrant red gem in Sea Point, Arthur's Mini Super brings a unique twist to the aperitivo experience with its eclectic selection of snacks and beverages. The laid-back vibe makes it a perfect spot to unwind after a long day while enjoying the sunset over the Sea Point Promenade. IAU-GA delegates can enjoy a complimentary coffee or other hot drink (excl. matcha and alternative milks) when showing conference badge.

Club Kloof

Known for its chic and stylish vibe, Club Kloof is the perfect spot to enjoy a sophisticated aperitivo. Sip on expertly crafted cocktails or mocktails while soaking in the stunning Table Mountain views from the vibrant Kloof Street.



Each offers an unique atmosphere and array of pre-dinner treats, making them must-visit spots for both locals and visitors alike.



Question of the day

How important is it for you to come to the GA and what do you expect from it? How important is it for your future career?



In this issue we interviewed only students. For them it is very important to meet potential employers in person and the GA offers a great variety. Saida, PhD student in solar physics gets very specific: “The conference was expensive, so I had to choose. I love the concept of the OAD, it’s a concept that has to be replicated. I’d be happy to work with them. The GA gives me ideas what to do next.” Boitumelo from Botswana working with radio data of spirals remarks “I am very inspired by the posters and outreach activities. I just talked to data visualization people and got great ideas on how to display my data”. Ketan, who built an X-ray polarimeter for a satellite launched in January has specific plans: “I already talked to several groups doing instrumentation, and I want to visit the SAAO next week.”



Saida M. Diaz-Castillo, KIS Freiburg, Germany, originally from Colombia. “I wanted to contribute to the first GA on the African continent”



Boitumelo Gaolape, Botswana University of Science & Technology (her name means “a happy person that never gets tired”). “The meeting opens my mind to consider other countries and institutes.”



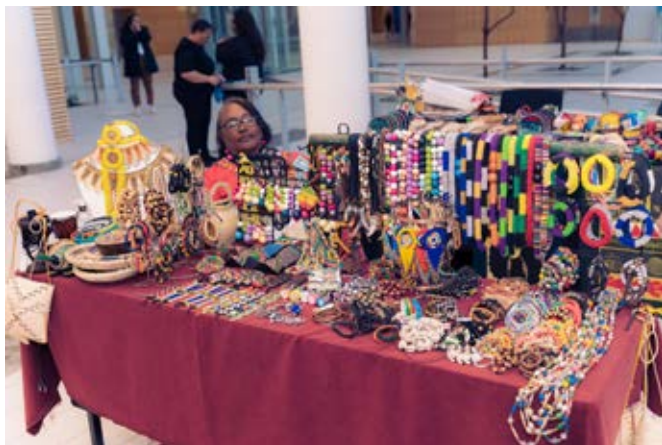
Ketan Bhaskar Rikame, Raman research institute Bangalore, India. “I can finally showcase my work I did the last 5 years.”

Pop-up market

Our pop-up market at the GA is a vibrant marketplace that offers a platform for local makers, vendors, and crafters to showcase and sell their handmade goods to a global audience.

The market not only provides a unique and authentic shopping experience for conference participants but also supports local entrepreneurs and positive socio-economic impact, highlighting the rich cultural heritage and artisanal talent in Cape Town.

Visit our [Flickr gallery](#) for more images



PROGRAMME WEEK 1

	TUE - Aug 6th		WED - Aug 7th		THU - Aug 8th		FRI - Aug 9th
08:30 – 10:00 Morning plenary	Registration		IAUS 389 plenary		IAUS 390 plenary		IAUS 391 plenary
10:00 – 10:30 Morning e-poster & coffee break	IAUS 389, 390, 391 FM1, FM2, FM3, FM7, OAO		IAUS 389, 390, 391 FM1, FM2, FM5, FM6, CPS, OAE		IAUS 389, 390, 391 FM3, FM7, FM5, FM6, OYA, OAD		Division e-poster
10:30 – 12:00 Morning oral session	S 389-1 S 390-1 S 391-1 OAO-1	FM1-1 FM2-1 FM3-1 FM7-1	S 389-4 S 390-4 S 391-4 CPS-1 OAE-1	FM1-4 FM2-4 FM5-4 FM6-1	S 389-7 S 390-7 S 391-7 OYA-1 OAD-1	FM3-4 FM7-4 FM5-4 FM6-4	Parallel Division Oral Sessions
12:00 – 13:30 Lunch	Shaw Prize		ODE Prize Talks		Gruber Prize		Women in Astronomy
13:30 – 15:00 Afternoon oral session 1	S 389-2 S 390-2 S 391-2 OAO-2/ WG5	FM1-2 FM2-2 FM3-2 FM7-2	S 389-5 S 390-5 S 391-5 CPS-2 OAE-2	FM1-5 FM2-5 FM5-2 FM6-2	S 389-8 S 390-8 S 391-8 OYA-2 OAD-2	FM3-5 FM7-5 FM5-5 FM6-5	Parallel Division Oral Sessions
15:00 – 15:30 Afternoon e-poster & coffee break	IAUS 389, 390, 391 FM1, FM2, FM3, FM7, WG5, OAO		IAUS 389, 390, 391 FM1, FM2, FM5, FM6, CPS, OAE		IAUS 389, 390, 391 FM3, FM7, FM5, FM6, OYA, OAD		Division e-poster
15:30 – 17:00 Afternoon oral session 2	S 389-3 S 390-3 S 391-3 OAO-3	FM1-3 FM2-3 FM3-3 FM7-3	S 389-6 S 390-6 S 391-6 CPS-3 OAE-3	FM1-6 FM2-6 FM5-3 FM6-3	S 389-9 S 390-9 S 391-9 OYA-3 OAD-3	FM3-6 FM7-6 FM5-6 FM6-6	Joint Offices Meeting
17:15 – 18:30 Afternoon plenary	Opening Ceremony		Business 1		Invited Discourse: Dr Bernie Fanaroff		Invited Discourse: Prof Joop Schaye
18:30 – 21:30 Various	Welcome Reception		Public Talk: Astronaut Dr Sian Proctor 19:30 – 21:30		An evening with NASA 19:00 – 21:00		Public Talk: Prof Gerry Gilmore 18:15 – 19:15 Astronomer's Got Other Talent 19:30 – 21:30

Background: Neutral hydrogen in the Large Magellanic Cloud. Image courtesy of CSIRO, L. Staveley-Smith.

PROGRAMME WEEK 2

	MON - Aug 12th	TUE - Aug 13th	WED - Aug 14th	THU - Aug 15th
08:30 – 10:00 Morning plenary	Offices plenary	IAUS 392 plenary	IAUS 393 plenary	IAUS 394 plenary
10:00 – 10:30 Morning e-poster & coffee break	Division e-poster	IAUS 392, 393, 394 FM4, FM8, FM9, FM10, WG1, WG2	IAUS 392, 393, 394 FM4, FM8, FM11, FM12, WG3	IAUS 392, 393, 394 FM9, FM10, FM11, FM12, WG6, WG4
10:30 – 12:00 Morning oral session	Parallel Division Oral Sessions	S 392-1 S 393-1 S 394-1 WG1-1 WG2-1	FM4-1 FM8-1 FM9-1 FM10-1	S 392-4 S 393-4 S 394-4 WG1-4 WG3-2
12:00 – 13:30 Lunch			FM4-4 FM8-4 FM11-1 FM12-1	S 392-7 S 393-7 S 394-7 WG6-1 WG4-1
13:30 – 15:00 Afternoon oral session 1	Parallel Division Oral Sessions	Kavli Prize Talk by David Charbonneau	Young Astronomers	FM9-4 FM10-4 FM11-4 FM12-4
15:00 – 15:30 Afternoon e-poster & coffee break	Division e-poster	S 392-2 S 393-2 S 394-2 WG1-2 WG2-2	FM4-2 FM8-2 FM9-2 FM10-2	S 392-5 S 393-5 S 394-5 WG2-3 WG3-3
15:30 – 17:00 Afternoon oral session 2	9 Parallel Division Oral Sessions	IAUS 392, 393, 394 FM4, FM8, FM9, FM10, WG1, WG2	IAUS 392, 393, 394 FM4, FM8, FM11, FM12, WG3	FM4-5 FM8-5 FM11-2 FM12-2
17:15 – 18:30 Afternoon plenary	Gala Dinner	S 392-3 S 393-3 S 394-3 WG1-3 WG3-1	FM4-3 FM8-3 FM9-3 FM10-3	S 392-8 S 393-8 S 394-8 WG6-2 WG4-2
18:30 – 21:30 Various		Invited Discourse: Prof Natalie Batalha	S 392-6 S 393-6 S 394-6 WG2-4 WG3-4	FM9-5 FM10-5 FM11-5 FM12-5
		Public Talk: Prof George Ellis 18:15 - 19:15	Business 2	IAUS 392, 393, 394 FM9, FM10, FM11, FM12, WG6, WG4
		Cultural Evening 19:30 - 21:30	The Cosmic Savannah Guest: Nobel Prize winner Prof Brian Schmidt 19:30 - 21:30	S 392-9 S 393-9 S 394-9 WG6-3 WG4-3
				FM9-6 FM10-6 FM11-6 FM12-6
				Closing Ceremony Handover

Background: The Milky Way above the ATCA. Image courtesy of E. Lenc.

Exhibitors



BUSINESS
EVENTS
PERTH



PUBLIC EVENTS

IN PERSON & ONLINE

#astronomy2024

07 /08 Journey into Space with Astronaut Dr. Sian Proctor

08 /08 Evening With NASA

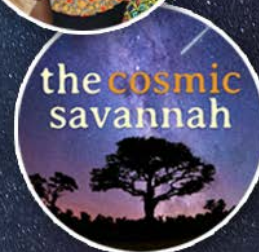
09 /08 Women in Space Science & Astronomy
The Milky Way with Prof Gerry Gilmore
Astronomers Got Talent!

10 /08 Stargazing at V & A Waterfront

13 /08 Nature of the Universe with
Prof George Ellis

13 /08 #AfricaLookUp Cultural Exchange Evening

14 /08 The Cosmic Savannah Live Show
with Nobel Prize Winner Prof Brian Schmidt.



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Research
Foundation

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African Astronomical Society

XXXII IAU GENERAL ASSEMBLY

CAPE TOWN, SOUTH AFRICA, 2024

The team behind the design, layout, content writing and editing of the XXXIInd IAU GA newsletter includes Patrick Saunders; Guido Schwarz; Laura Hiscott; Maria Stone; Christina Thöne; Shirley Aoko; Gwen Sanderson; Marcelina Kinyumu; Daniel Cunnamo; Susan Caras



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XXXII  GENERAL ASSEMBLY

6 - 15 AUGUST 2004

Cape Town, South Africa



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