CULTURAL ASTRONOMY SCHOOL: 2-4 JULY 2025

Version 4: 27 June 2025

2 July	History, Theory & Professional Development
09:00 – 09:10	Duane Hamacher – University of Melbourne, Australia Welcome
09:10 - 10:30	Clive Ruggles – University of Leicester, UK The Last 50 Years of Cultural Astronomy
10:30 – 11:00	Break
11:00 – 11:45	Jarita Holbrook – Harvard–Smithsonian Center for Astrophysics, USA/UK Theories that Every Cultural Astronomer should know
11:45 – 12:30	Gerhard Wiesenfeldt – University of Melbourne, Australia Indigenous astronomy and Science
12:30 – 13:30	Lunch
13:30 - 14:30	Tim Patston – University of Melbourne, Australia Integrating Indigenous Knowledges into STEM Curricula
14:30 – 15:30	Travel to Planetarium
15:30 – 17:00	Planetarium Program Melbourne Planetarium, Scienceworks - Spotswood
19:00 – 21:00	Dinner at University House (Professor's Walk)

3 July	Quantitative Methods and Archaeoastronomy
09:00 – 10:30	César González-García – INCIPIT, Spain Fieldwork and Statistical Analysis in Archaeoastronomy
10:30 – 11:00	Break
11:00 – 12:30	Gail Higginbottom – Bournemouth University and Flinders University, UK and Australia <i>An introduction to the digital visualisation of past skies and landscapes</i>
12:30 – 14:00	Lunch

14:00 – 15:30	Morgan Saletta – University of Melbourne, Australia Orientations and Illumination: Time-lapse photography (and related methods) for identifying and recording seasonal solar illumination of monuments.
15:30 – 16:00	Break
16:00 – 17:30	Georg Zotti – VRVis Vienna, Austria Stellarium: Desktop Simulation of Past and Present Skies

4 July	Qualitative Methods and Ethnoastronomy
09:00 – 10:30	Alejandro Martín López – CONICET-University of Buenos Aires, Argentina <i>Ethnoastronomy as a perspective</i>
10:30 – 11:00	Break
11:00 – 12:30	Lynne Kelly – University of Melbourne, Australia Memory, Mnemonic and Cultural Astronomy
12:30 – 14:00	Lunch
14:00 – 14:45	Thilina Heenatigala – Earth-Life Science Institute (ELSI), Japan Rethinking Science, Culture, and Power
14:45 – 15:30	Shea Esterling – University of Canterbury, Aotearoa/New Zealand Legal frameworks for Indigenous Knowledge, Space, and Dark Skies
15:30 – 16:00	Break
16:00 – 17:00	Duane Hamacher – University of Melbourne, Australia Building a Career in Cultural Astronomy
18:00 – 19:00	Clive Ruggles - University of Leicester, UK Pacific Sky Knowledge - July Lectures in Physics

6 July	Public Lecture and Telescope Viewing
19:30 – 21:30	Telescope Viewing – Astronomical Society of Victoria State Library of Victoria (front steps)

IAU SYMPOSIUM 399: 7-11 JULY 2025

Monday, 7 July: Archaeoastronomy

08:00 - 09:00	Registration
09:00 - 09:50	Welcome
09:00 - 09:10	Duane Hamacher & Jarita Holbrook – IAUS 399 Chairs Welcome to IAUS 399
09:10 - 09:20	Aunty Annette Xiberras – Wurundjeri Elder, Australia Welcome to Country
09:20 - 09:35	Barry Judd – Deputy Vice-Chancellor (Indigenous), University of Melbourne, Australia Supporting Indigenous Endeavours
09:35 - 09:50	Marcia Langton – Associate Provost (Indigenous), University of Melbourne, Australia Why Indigenous Astronomy Matters
09:50 - 10:30	Session 1: Frameworks & Theory
09:50 – 10:10	Alejandro Martin-Lopez – University of Buenos Aires, Argentina Astronomical Heritage's Cosmopolitics: Shamanism and Hegemonic Modernity
10:10 – 10:30	Wayne Orchiston – Univ. of Science and Technology of China & USQ, China/Australia New Directions in Cultural Astronomy: Researching the Past
10:30 – 11:00	Morning Tea
11:00 – 13:00	Session 2: Tools & Methods
11:00 – 11:20	Susanne M. Hoffmann – IAU Working Group on Star Names, Germany Introducing the All-Skies Encyclopaedia
11:20 – 11:40	Georg Zotti – VRVis Vienna, Austria Introducing Stellarium Skycultures 2.0
11:40 – 12:00	Elizabeth Brooker – James Cook University, Australia Using Stellarium to Obtain Star Position Data

Kazuhiro Sekiguchi – National Astronomical Observatory of Japan, Japan "arcAstro–VR" for Archaeoastronomy
Irma Hariawang – TB Astronomy Alumni Association, Indonesia Using Machine Learning to Interpret the Insights into Borobudur's Celestial Reliefs
Maitane Urrutia–Aparicio – Universidad Europea de Canarias, Spain Pathways to the Oases: Introducing machine learning to archaeoastronomical study of funerary structures in Northwest Arabia
Lunch
Session 3: Archaeoastronomy I
Clive Ruggles – University of Leicester, UK Lunar observations at Stonehenge
Ivan Ghezzi (Clive Ruggles) – UE Chankillo, Peru Astronomy before Chankillo: insights from Landscape Field
Juan Antonio Belmonte – Instituto de Astrofísica de Canarias, Spain Revealing ancient Indigenous astronomies through their architecture
A. César González-García – Institute of Heritage Sciences, INCIPIT, Spain Cultural Astronomy of a Paī Tavyterã (Guaraní) ceremonial house in Amambay
Gail Higginbottom – University of Bournemouth, UK The Cultoon stone circle: investigations continue
Afternoon Tea
Session 4: Archaeoastronomy II
Jose Lull – Universidad Autónoma de Barcelona, Spain How Indigenous is ancient Egyptian astronomy?
Po-Sheng Ou – National Taiwan University, Taiwan (Video) Reconstructing the Skyscape on the Island of Mountains
Ide Nada Imandiharja – Bandung Institute of Technology, Indonesia <i>Testing the connection between the appearance of Comet 1P/Halley in 760 CE</i>
Kharisma Nabila – Universitas Gadjah Mada, Indonesia Tracing the Ancient Indonesian Javanese Inscriptions on the Appearance of Supernovae: An Archaeoastronomical Review of the Turun Hyang B and Jaring Inscriptions

18:00 – 19:00 Reception – University House

Videos Luis Gonzalez – University of British Columbia, Canada

What is above is Below: Celestial representations in the architecture at Quilcapampa La Antigua.

Leandro De Paula Neto - Instituto IRATU, Brasil

Archaeoastronomy Among Shell Mounds

Aysegul Yelkenci – Istanbul Kultur University, Turkey

An archaeoastronomical overview of Hittites geography

Erica Ellingson – University of Colorado at Boulder, USA

Moonrise at Chimney Rock

Posters

Cuauhtemoc Mendez – TRIBU cultura astronómica / Tec de Monterrey, Mexico

Ancient astronomy in Mexico and its hierophanies

Gregory Munson – Society for Cultural Astro. in the American Southwest, USA

Envisioning the Cultural Landscapes of the Greater American Southwest

Youla Azkarrula – Independent Scholar, Indonesia (Virtual)

Introducing: Stellarium Sky Culture Maker

Mulugeta Markos Tediso - Dambi Dollo University, Ethiopia

Investigating the Ethno Geometric Pattern of Positional Astronomy in the

Archaeoastronomical Research Site of the Oromoo Calendar

Mulugeta Markos Tediso - Dambi Dollo University, Ethiopia

Opening African Astronomical Heritage Research Division at the Qellem Wallaga Zone

Tuesday, 8 July: Indigenous Astronomy

08:00 - 09:00	Open
09:00 - 10:40	Session 5: Indigenous Astronomy in Australia and Oceania
09:00 - 09:20	John Goldsmith – Space Science and Geophysical Institute, Australia (Video) Australia's Cultural Night Sky
09:20 - 09:40	Robert Fuller – University of Western Sydney, Australia Aboriginal Astronomy of the Sydney Basin
09:40 – 10:00	Isaac Warbrick & Jade Kameta – Auckland University of Tech, Aotearoa/New Zealand It's not a Horoscope" – A Māori system of celestial observation and implementation for achieving Indigenous well-being
10:00 – 10:20	Exodus Chun-Long Sit – IAU NAEC, Hong Kong–China (Video) Indigenous Astronomy and Ancient Constellations in the Pacific places
10:20 - 10:40	Regina Indah Syalaisha – Bandung Institute of Technology, Indonesia Calendrical Diversity on a Small Island: Sabu Raijua Traditional Calendar
10:40 - 11:10	Morning Tea
11:10 – 12:50	Session 6: Indigenous Astronomy in Asia
11:10 – 11:30	Dafon Aimé Segla – Université d'Abomey–Calavi, Benin (Video) Predicting seasonal changes in a community village in southeran Benin Republic (West Africa)
11:30 – 11:50	Habtamu Fekadu Etefa – Dambi Dollo University, Ethiopia (Video) Investigating the Indigenous Names of the Seven Days in Ethiopia's Week of the Borena Calendar
11:50 – 12:10	Ladislaus Batinoluho – DarkSky Tanzania, Tanzania Investigation of Indigenous Astronomical Knowledge in Improving Livelihood for Rural Communit in Tanzania
12:10 – 12:30	Paul Nyarko-Mensah – University of Pretoria, South Africa <i>An Almost Forgotten "Star Compass" of the Mfantse Fishermen</i>
12:30 – 12:50	Neil Rusch – University of the Witwatersrand, South Africa (Video) Counter–Mapping: Building bridges and locating a place in space for /Xam San cosmology

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12:50 – 13:50	Lunch
13:50 – 15:30	Session 7: Indigenous Astronomy in Africa
13:50 – 14:10	Kang–Shian Pan – Dabang Elementary School No. 1, Taiwan Reconstructing the Seven Stars (fkuu) Story in Taiwan Indigenous Cou Culture
14:10 – 14:30	Megumi Yamauchi – Independent Researcher, Japan Activities on the constellations of the Indigenous Ainu peoples of Japan
14:30 – 14:50	Akira Goto – Nanzan University, Japan Heaven as an Interactive Arena for humans and nature among the Ainu
14:50 – 15:10	Martine Joy Irog – Philippine Astronomical Society, Philippines Ethnoastronomy in the Cordilleras: Exploring the Astronomical Beliefs of the Bontoc
15:10 – 15:30	Joshua Jewel Palolan – Cagayan Museum & His. Research Center, Philippines (Video) What is in Heaven, is also on Earth: A Preliminary Exploration of Cagayan Indigenous Astronomy
15:30 – 16:00	Afternoon Tea
16:00 – 17:20	Session 8: Indigenous Astronomy in the 'Americas'
16:00 – 16:20	Chris Cannon – University of Alaska at Fairbanks, USA (Video) <i>In the Footsteps of the Traveler: the astronomy of Northern Dene</i>
16:20 – 16:40	Mary Motah Weahkee – Society for Cultural Astro. in the American Southwest, USA Traditional Eyes and Scientific Instruments: Indigenous Interpretations of Cultural Astronomy Research in the Greater American Southwest
16:40 – 17:00	Daniel Pedreros Cifuentes – Secretaría de Educación del Vaupés, Colombia (Video) The Culture of the Sky of the Jaguars of Yurupari
17:00 – 17:20	Priscila Faulhaber – Museum of Astronomy and Related Sciences, Brasil (Video) <i>The Amazonian Tikuna</i> / <i>Magiita animate constellations</i>
18:30 – 20:00	Indigenous Space Futures – Panel Discussion Melbourne Museum, Carlton
Videos	Hannah Maresfin – Himpunan Astronomical Amatir Jakarta, Indonesia <i>Ethnoastronomy of Aceh Traditional Guidance in Agriculture</i>
	Ryan Eckerson – University of Iceland, Iceland

Revealing Gylfi's Illusion: A Systematic Analysis and Proposed Astronomical Interpretation of Mythological Elements Found in Gylfaginnin

Etsegenet Alemu – Space Science & Geospatial Institute, Ethiopia

Cultural Astronomy of Ethiopia: Borana Indigenous Astronomical knowledge

Posters

Barthélemy d'Ans Alleman – Instituto Peruano de Astronomía, Peru **(Virtual)** *Iconographic evolution of a Lunar myth*

Trevor Leaman - University of New South Wales, Australia

The Terrestrial Emu, Wiradjuri Country: is it an earthly counterpart to the Celestial Emu recognised from Aboriginal skylore? Could it also be part of a larger terrestrial 'Sky Map'?

Dimitri Douchin – University of Western Sydney, Australia

The Elvina Trail platform as a Milky Way site

Abduselam Mohammed Yasin - Dambi Dollo University, Ethiopia

Investigating the Connection between the Waaqeffannaa Religion and Borena Calendar in the Oromoo Culture

Exodus Chun-Long Sit – IAU NAEC, Hong Kong–China (Virtual)

Indigenous Astronomy and Ancient Constellations in the Pacific places

Edilberto Suárez–Torres – Universidad Distrital, Bogotá, Colombia

Ancestral Astronomy in Colombian Ecuador

Auta Stella de Medeiros Germano – Univ. Federal do Rio Grande do Norte, Brasil Some Indigenous and other traditional communities' patterns in Rio Grando do Norte´s skies

Wednesday, 9 July: Panel Discussion, GM & Excursion

08:00 - 09:00	Open
09:00 – 10:30	Panel Discussion
	Square Kilometre Array Observatory (SKAO) – Indigenous Partnerships Enabling Mega-Science Infrastructure: Wajarri Yamaji and the Ska Project <i>Talk (45 mins) and Panel Discussion (45 mins)</i>
	Panellists:
09:00 – 10:30	 Des Mongoo - Chair, Wajarri Enterprise Ltd Jennylyn Hamlett - Wajarri Liaison Officer, Wajarri Yamaji Aboriginal Corporation Antony Schinckel - SKA-Low Site Construction Director, SKA Observatory Jonathan Rogers - Australian Government Department of Industry, Science and Resources Rebecca Wheadon - CSIRO Site Entity Lead, CSIRO
10:30 – 11:00	Morning Tea
11:00 – 12:30	Joint General Meeting of ISAAC and IAU Commission C5: Cultural Astronomy
12:30 – 18:00	City Excursion / Scavenger Hunt
18:00 – 19:00	Scavenger Hunt Prize Collection University House (Professor's Walk)
Videos	Thiago Siqueira – Federal University of Rio de Janeiro, Brasil Catholic Churches in Downtown Rio de Janeiro
	Patrick McCafferty – Chemnitz University of Technology, Germany Newgrange: a religious temple to the oldest recorded eclipse

Thursday, 10 July: Dark Skies & Space Futures

08:00 - 09:00	Open
09:00 - 10:40	Session 9: Dark & Quiet Skies I
09:00 – 09:20	Shea Esterling – University of Canterbury, Aotearoa/New Zealand Protecting Our Dark Skies: Indigenous Knowledges and the Law
09:20 - 09:40	Nalayini Davies – DarkSky International, Aotearoa/New Zealand, UK How dark sky conservation supports the resurgence of cultural/Indigenous astronomy
09:40 – 10:00	Danielle Adams – Flagstaff Dark Skies Coalition, USA Indigenous Ties to Dark Skies: Arabian Astronomy at the Limits of Naked–Eye Visibility
10:00 – 10:20	Ahmad Hariz Bely – Universiti Sultan Zainal Abidin, Malaysia Spatial Modeling of Artificial Light at Night (ALAN) at the Pusat Astronomi Borneo
10:20 - 10:40	Shafayet Rahman – IAU office for Astronomy Outreach, Bangladesh (Video) <i>AI–Powered Solutions for Preserving Indigenous Knowledge and Dark Skies in Urban Spaces</i>
10:40 - 11:10	Morning Tea
11:10 – 12:50	Session 10: Dark & Quiet Skies II
11:10 – 11:30	Peter Swanton – Australian National University, Australia Space age threat to dark and quiet skies
11:30 – 11:50	Barbara Horváth – Széchenyi István University, Hungary Protecting dark and quiet skies from interference by satellite mega–constellations
11:50 – 12:10	Jessica Heim – University of Southern Queensland, Australia (Video) Cultural Astronomy, Dark Skies, Satellite Constellations and the Space Environment
12:10 – 12:30	Samantha Lawler – University of Regina, Canada (Video) Protecting dark and quiet skies from Satellite pollution
12:30 – 13:30	Lunch

Session 11: Indigenizing Astronomy & Astrophysics
Hilding Neilson – Memorial University of Newfoundland & Labrador, Canada Indigenizing the Drake Equation: how Indigenous methods can help us understand life in the Milky Way Galaxy
Dionysios Gakis – University of Texas at Austin, USA <i>Echoes of Star Stories: Integrating Indigenous narratives into modern stellar astrophysics</i>
Jamie Rooney – University of Melbourne, Australia No Silver Bullet: the path of co-design in First Nations Led Astrotourism
Anton Binneman – SARAO, South Africa MeerKAT, the SKA and Indigenous Knowledge
Tumo Fortunate Kedumele – Botswana Int. Univ. of Science & Tech., Botswana (Video) <i>Cultural Astronomy for Sustainable Development: A study on Indigenous San Communities in Botswana and Namibia</i>
Afternoon Tea
Session 12: Space Futures
Morgan Saletta – University of Melbourne, Australia Space: A global commons for all humanity
Andrea Rodríguez–Antón – Institute of Heritage Sciences (INCIPIT–CSIC), Spain <i>Is there a place in the space for refugees? Astronomy of the Western Sahara from the exile</i>
Hae-Seo Kim – University of California at Irvine, USA Moon Ritual and Shamanic Outer Space in South Korea
Antonia Wibowo – National Research and Innovation Agency, Indonesia Observatory and Sustainable Development Goals
John Barentine – Dark Sky Consulting, LLC, USA (Video) Unacceptable to our people': diverse cultural beliefs, Indigenous rights, and the future of human activities on the Moon
Conference Dinner & Keynote Woodward Conference Centre
Joaquín Viluch e – Autonomous Intercultural Indigenous University, Colombia <i>Keynote Lecture</i>

Videos Joyful Mdhluli – IAU office of Astronomy for Development, South Africa

Astrotourism: A Tool to Promote Dark and Quiet Skies

Armando Mudrik – Instituto de Antropología de Córdoba, Argentina

Light pollution and its perception in rural contexts in the central–northern region of Santa Fe province, Argentina

Fiorella Karla Nava Chuctaya – Univ. Nacional de San Agustín de Arequipa, Peru *Architectural Heritage in Astronomical Observatories: Adapting Terrestrial Architectural Designs to Space Environments*

Krystal De Napoli – Monash University, Australia

Posters

Outshined and Endangered: the Impact of Artificial Light on Australia's Wildlife

Gregg Wade - Royal Military College of Canada, Canada

Guerillas amongst the soldiers: Indigenization and Decolonization of Science curriculum at Canada's most colonial post–secondary institution

Hong-Bing Ong – National Taiwan University, Taiwan

Contesting the Night Sky: A Preliminary Study of Landscape, Scientific Knowledge, and Indigenous Peoples in Hehuan Mountain Dark-Sky Park

Friday, 11 July: Education, De-Colonisation, and the Arts

08:00 – 09:00	Open
09:00 - 10:40	Session 13: Education
09:00 – 09:20	Saeed Salimpour – Deakin University, Australia Astronomy and Culture: Using social semiotics to make deeper connections in Astronomy education
09:20 - 09:40	Jose Balbi – Museo del Observatorio de Fisica Cosmica, Argentina Learning of the Outside
09:40 – 10:00	Cintia Duran – International Astronomical Union, Mexico A Sun That Never Sets: Methods of Outreach and Educational Commitments for Astronomy
10:00 – 10:20	Yuko Kakazu – NAOJ & TMTIO, Japan (Video) Ale Lau Loa: Indigenous Culture–based learning
10:20 – 10:40	David Bosun – Mualgal Artist, Torres Strait, Australia (Video) Art & Star Knowledge of the Torres Strait
10:40 – 11:10	Morning Tea
11:10 - 12:30	Session 14: Colonialism and Decolonisation in Astronomy
11:10 – 11:30	Doug Sam – University of Oregon, USA Colonialism and Eclipses: Native Americans, and Astronomers Contest the Creation of the Astronomical West, 1860–1890
11:30 – 11:50	Thilina Heenatigala – Earth-Life Science Institute (ELSI), Japan Perspectives from the United Nations Science Summit on Decolonising Astronomy and Space Exploration
11:50 – 12:10	Jarita Holbrook – Harvard–Smithsonian Center for Astrophysics, USA/UK Astrophysicists & Discrimination
12:10 – 12:30	Valentina Bassich – Imperial College London, UK (Video) First Nations Astronomy as a Path to Decolonising Australian Museums: Challenges and Opportunities
12:30 – 13:30	Lunch

13:30 - 15:00	Session 15: Poetry and Performance in Cultural Astronomy
13:30 – 13:50	Estelle Castro–Koshy – Université de Bretagne Occidentale, France The ambivalent resonance of spent energy: Re–imagining the Space Age through Indigenous/First Nations Poetry
13:50 – 14:10	Romaine Moreton – RMIT University, Australia OSPAPIK Poetry Performance
14:10 – 14:35	Daniel Peluso – SETI Institute, USA Celestial Harmonies Musical Performance
14:35 – 15:00	Bon Mott & Simon Rose – Second Space Projects, Australia <i>Researching Lightning's Origins with First Nations People in Minnesota, Turtle Island and Australia</i> (Performance Art)
15:00 – 15:30	Afternoon Tea (includes drawing performance by Bon Mott and Simon Rose)
15:30 - 17:00	Session 16: Indigenous Ecosystem Learning
15:30 – 16:30	Native Skywatchers Team – Native Skywatchers, USA Indigenous Ecosystem Learning (Includes Hawaiian Star Compass Interactive Performance)
16:30 – 17:00	Annette Lee – Native Skywatchers, USA Exhibit: Soundscapes Across Waterworlds (Sound-Based Moving Image Art, Conceptual Basis & Highlights)
17:00 – 17:30	Jarita Holbrook and Duane Hamacher – ISAAC Council Conference Review and Wrap-Up
17:30	Conference Close
18:30	Bus leaves Campus for Planetarium in Spotswood
19:30 – 20:30	Planetarium Show – Voyager: The Never-Ending Journey Scienceworks, Spotswood
20:45	Bus leaves Spotswood for Campus
Videos	Milagros Varguez – Native Skywatchers, Mexico Mexican Archaeoastronomy in the Planetariums of the World

Giuliana Rotola – IAU Centre for the Protection of the Dark and Quiet Sky from Satellite Constellation Interference (CPS), Italy

Decolonizing the Outer Space Treaty: Integrating Marginalized Perspectives in Space Governance

Stephen Case - Olivet Nazarene University, USA

Colonial Skies: John Herschel, Colonialism, and the History of Astronomy

Posters

Nilakshi Veerabathina & Fajer Jaafari – University of Texas at Arlington, USA

Creating an Archeoastronomy Course as part of an Astronomy Minor Track for Non–Science Students

Bridget Kelly - University of Melbourne, Australia

Common constellations across cultures

Kang-Shian Pan – Dabang Elementary School No. 1, Taiwan

Introduce Practical Astronomy with Taiwan Indigenous Cou Culture to School

Karen Knierman – Arizona State University, USA

Indigenous Astronomy Education and Outreach at Arizona State University

Emiru Diriba Hirpa – Dambi Dollo University, Ethiopia

Investigating the significance of cultural astronomy research for forming Space Science Club

Trevor Leaman – University of New South Wales, Australia

The Wiradjuri Murriyang Project: creating constellation artworks for Stellarium and related educational content

Joshua Sokol – Freelance Science Journalist, USA (Virtual)

How we loved and lost the stars: the fate and stakes of the night sky as narrative nonfiction

Ray Norris - CSIRO / University of Western Sydney, Australia

The Seven Sisters story as a tracer of human migration