

Meteoroids 2025 program

MONDAY	Session	Abstract	First Name	Last Name	Abstract Title / Activity
08:30	Registration				
08:45					
09:00	Welcomes				Ellie Sansom (LOC chair), Gretchen Benedix (Curtin Associate Deputy Vice-Chancellor - Research), and Pavel Koten (SOC chair)
09:15					
09:30	Composition and Physical Properties	49	Pavel	Koten	Meteor clusters: tracing meteoroid fragmentation in near-Earth space
09:45		52	Nicholas	Moskovitz	Ongoing Investigations with the Lowell Observatory Meteor Camera Network
10:00		68	Maximilian	Vovk	Physical characteristics of shower meteoroid inferred through Dynamic Nested Sampling
10:15		64	Thomas	Stevenson	Comparing Mechanical Strengths of Real and Simulated Meteoroids
10:30		65	Juraj	Toth	AMOS global meteor network - status and results
10:45					TEA/COFFEE BREAK
11:00					TEA/COFFEE BREAK
11:15		14	Jiri	Borovicka	Physical properties of kappa Cygnid and eta Virginid meteoroids (talk presented by Pavel Koten)
11:30		55	Veronika	Pazderová	Comparative analysis of meteor spectra observed simultaneously from multiple locations
11:45		67	Tomáš	Vörös	Modelling of faint meteors and bolides using AMOS all-sky data
12:00					LUNCH BREAK
12:15					LUNCH BREAK
12:30					LUNCH BREAK
12:45					LUNCH BREAK
13:00					LUNCH BREAK
13:15	Future Methods and Techniques	1	Simon	Anghel	Machine Learning in Meteor Science: Advances and Applications
13:30					continued (invited talk)
13:45		58	Eleanor	Sansom	Ten years of the digital Desert Fireball Network - from meteorites to space debris
14:00		66	Jeremie	Vaubailon	Use of event-based camera for meteor science
14:15					TEA/COFFEE BREAK
14:30					TEA/COFFEE BREAK
14:45		31	Dale	Giancono	A Real-time All-Sky Fireball Camera Array Prototype for the Desert Fireball Network: Initial Results
15:00		48	Svitlana	Kolomiyets	Classical Histogram Analysis of Radar and Optical Meteor Data: Key Points
15:15		11	Simon	Anghel	Enhancing Meteoroid Research Through the NASA Science Explorer (SciX)
15:30			Patrick	Shober	Career session
15:45					Career session
16:00					Career session
16:15					(buses leave for welcome night)

Meteoroids 2025 program

TUESDAY	Session	Abstract	First Name	Last Name	Abstract Title / Activity
09:00	Meteor Physics and Chemistry	3	Adriana	Pisarčíková	Advances in Meteor Spectroscopy: Observational and Laboratory Perspectives
09:15					continued (invited talk)
09:30		26	Logan	Dewsnap	Spectroscopic Observations of Tracked mm-sized Meteors
09:45		10	Shinsuke	Abe	Annual variation of sodium in the Geminids' spectra over 6-years
10:00		18	Dakota	Cecil	Exploring a New Approach to Simulating Meteors: Going Beyond DSMC
10:15		33	Maria	Gritsevich	Constraining Meteor Entry Velocity from Radar or Incomplete Optical Observations (talk presented by Eloy)
10:30					TEA/COFFEE BREAK
10:45					TEA/COFFEE BREAK
11:00					TEA/COFFEE BREAK
11:15					TEA/COFFEE BREAK
11:30	Entry acoustics	42	Anna	Kartashova	Investigation of the possibilities of simultaneous meteor observations from Russia and Tajikistan (talk given by Gulchehra)
11:45		36	Islam	Hamama	Infrasound Analysis of HTV Missions and Rocket Launches from Tanegashima Space Center, Japan (talk given by Masa-yuki Yamamoto)
12:00		72	Masa-yuki	Yamamoto	Infrasound observations for 3 SRC reentries as well as multiple configuration experiments with MOMO sounding rockets and STRATOVISION balloons
12:15		21	Iona	Clemente	Seismo-acoustic signals of fireballs: Comparing different types of atmospheric entry events.
12:30					LUNCH BREAK
12:45					LUNCH BREAK
13:00					LUNCH BREAK
13:15					LUNCH BREAK
13:30	Meteorite Recoveries	73	Anna	Zappatini	Droppers in good and bad places: three years of fireball monitoring in Oman
13:45		16	Daniel	Burgin	New Zealand's first camera-assisted meteorite recovery
14:00		23	Luke	Daly	UKFALL rising – the expansion of the UK Fireball Alliance.
14:15		25	Hadrien	Devillepoix	Real-time Drone-Assisted Meteorite Recovery: Towards Full Operational Capability
14:30					TEA/COFFEE BREAK
14:45					TEA/COFFEE BREAK
15:00					TEA/COFFEE BREAK
15:15	Influx of Interplanetary and Interstellar Material	17	Margaret	Campbell-Brown	Correcting meteor radar observing biases with simultaneous optical observations
15:30		32	Cole	Gregg	A Case Study of Interstellar Material Delivery: Alpha Centauri
15:45		60	Konstantinos	Servis	Debiasing Meteoroid Flux Estimates Using the Desert Fireball Network's Clear-Sky Survey
16:00		56	Petr	Pokorny	Understanding the Antarctic/Greenland dust deposits with meteoroid models
16:15		12	Anthony	Lagain	Using the lunar impact record to decipher the flux of kilometeric asteroids on Earth
16:30			Petr	Pokorny	Discussion: interstellar Meteoroids. Panel: Maria Hajdukova, Cole Gregg, Sophie Deam, Jeremie Vaubaillon?
16:45					Discussion (continued)
17:00					
17:15					

Meteoroids 2025 program

WEDNESDAY	Session	Abstract	First Name	Last Name	Abstract Title / Activity
09:00	Meteoroids in space	4	Eloy	Peña Asensio	The ESA's LUMIO mission: A new window into meteoroid characterization through far side lunar impact flash observations
09:15					continued (invited talk)
09:30		50	Jack	Lopes	Effects of meteoroid impacts as illuminators of lunar surface on water-ice stability
09:45		51	Mark	Millinger	Mitigating meteoroid impact risk and preparing future instrumentation
10:00	Space debris	37	Benjamin	Hartig	Space Debris Re-Entries Over Australia: A Survey of Events, Environmental Risk, and Correlation with Earth Observation Imagery
10:15		38	Bella	Hatty	Desert Fireball Network meets space junk: Capturing a Soyuz re-entry over Australia
10:30			Ellie	Sansom	Discussion: Meteoroid impact risks to spacecraft & space debris. Panel: Mark Millinger, Bella Hatty...
10:45					Discussion (continued)
11:00					Posters with brunch
11:15					Posters with brunch
11:30	Poster Session				Posters with brunch
11:45					Posters with brunch
12:00					Posters with brunch
12:15					
12:30					
12:45					
13:00					(excursions)

Meteoroids 2025 program

THURSDAY	Session	Abstract	First Name	Last Name	Abstract Title / Activity
09:00	Planetary Defence	54	Francisco	Ocaña	Planetary Defence Activities at ESA's Planetary Defence Office
09:15		22	David	Coward	The Southern Hemisphere Asteroid Research Consortium (SHARC)
09:30		30	George	Flynn	Hypervelocity Cratering and Disruption of Hydrous CM Chondrite and CI Simulant
09:45		15	Peter	Brown	A Search for Hydroacoustic Signals from Bolides
10:00					TEA/COFFEE BREAK
10:15					TEA/COFFEE BREAK
10:30		20	Ian	Chow	Dynamical and Physical Properties of Decameter-size Earth Impactors
10:45		62	Elizabeth	Silber	The 20 May 2023 bolide over Australia: Ground-to-space observations
11:00		63	Jeffrey	Smith	Finding Fireballs in Lightning: A Daily Pipeline to Find Bolides in GOES Weather Satellite Data
11:15			Peter	Brown	Discussion: Imminent Impactors. Panel: Nick Moskovitz, Ellie Sansom...
11:30					Discussion (continued)
11:45					Discussion (continued)
12:00					LUNCH BREAK
12:15					LUNCH BREAK
12:30					LUNCH BREAK
12:45					LUNCH BREAK
13:00	Dynamical Evolution	2	Patrick	Shober	Missing Pieces: The Atmospheric Filter and the Curious Case of Carbonaceous Chondrites
13:15					continued (invited talk)
13:30		24	Sophie	Deam	A Near-Earth Object Model Calibrated to Earth Impactors
13:45		28	Auriane	Egal	Chasing the Dragon: Forecasting the 2025 Draconids
14:00		39	Filip	Hlobik	Dynamical history of κ Cygnid and August Draconid meteoroids
14:15		44	Yung	Kipreos	The Origin of the Geminid Meteoroid Stream: Preliminary Results
14:30					TEA/COFFEE BREAK
14:45					TEA/COFFEE BREAK
15:00					TEA/COFFEE BREAK
15:15		29	Hani	Elbehiri	Perth array results and future plan
15:30		35	Maria	Hajdukova	Meteor Showers in Focus: Exposing Duplicates and Reclassification Needs
15:45					IAU F1 business meeting
16:00					IAU F1 business meeting
16:15					IAU F1 business meeting
16:30					IAU F1 business meeting
16:45					IAU F1 business meeting
17:00					IAU F1 business meeting
17:15					
17:30					(buses leave for dinner)

Meteoroids 2025 program

FRIDAY	Session	Abstrac	First Name	Last Name	Abstract Title / Activity
09:00		57	Olga	Popova	Lateral spreading of meteoroids fragments (talk given by Gulchehra)
09:15	Meteoroid Sources	40	Peter	Jenniskens	On the origin of our meteorites in the asteroid belt
09:30		61	Patrick	Shober	Searching for tidal disruption signatures amongst NEAs and impact data
09:45		34	Meryem	Guenoun	Decadal Analysis of FRIPON Meteoroid Orbits and Their Association with Known Near-Earth Asteroids (talk presented by Jeremie Vaubaillon)
10:00		27	Tam	Do	Which meteoroids are from asteroids and which are from comets?
10:15					TEA/COFFEE BREAK
10:30					TEA/COFFEE BREAK
10:45	Meteoroid Sources (showers)	70	Junichi	Watanebe	Meteor showers as a tool to investigate evolutionary history of the parent comets
11:00		13	Aishabibi	Ashimbekova	Reassessing 1200 meteor showers and their links to the near-Earth environment
11:15		43	Toshihiro	Kasuga	Comet 289P/Blanpain and the Phoenicids: Disruptive Past Revealed
11:30		59	Mikiya	Sato	Observation of the Outburst of the Tau-Herculid Meteor Shower in 2022
11:45		47	Gulchehra	Kokhirova	Investigation of the δ -Cancrid Asteroid-Meteoroid Complex
12:00			Hadrien	Devillepoix	Discussion: Outstanding questions in linking meteoroids and their parent bodies. Panel: Peter Jenniskens, Jeremie Vaubaillon, Patrick Shober...
12:15					Discussion (continued)
12:30					CLOSING
12:45					LUNCH BREAK

	Posters (Wednesday morning)	46	Gulchehra	Kokhirova	First results of meteor observations in Tajikistan within the Global Meteor Network project
		41	Peter	Jenniskens	Late formation of the Oort Cloud based on CAMS meteor observations
		45	Gulchehra	Kokhirova	Analysis of pre-perihelion non-stationary activity of comet 12P/Pons-Brooks in 2023
		19	Hasnaa	Chennaoui Aoudjehane	MOFID : The Moroccan Meteor Detection Network
		100	Guliyev	Ayyub	ANOMALOUS COMET TAILS, IMPACT FROM METEOROIDS AND SOLAR ACTIVITY
		101	Jiri	Borovicka	Atmospheric behavior and internal structure of large meteoroids
		102	Ariane	Courtot	Impact risk from a heliocentric dust ring on Venus orbit
		103	Sophie E.	Deam	Solar System lottery: what were the chances?
		104	Vladimir	Efremov	Estimating of the meteor parameters under various effects
		105	George	Flynn	Aqueous Processing on Asteroid Ryugu
		106	Michael	Frazer	Extracting Surface Temperature From Spectral Data at Martian Impact Craters
		107	Bella	Hatty	Dynamic Trajectory Fit for Space Debris Re-Entry: Insights from the Crew 5 Dragon Event
		108	Sergey	KALABANOV	Meteor Orbit Characteristics Based on 2022–2023 Observations from Meteor Radar at KFU
		109	Gulchehra	Kokhirova	Analysis of pre-perihelion non-stationary activity of comet 12P/Pons-Brooks in 2023
		110	Gulchehra	Kokhirova	Dust productivity of comet C/2021 S3 (PANSTARRS) in 2024
		111	Iryna	Kyrychenko	Software calculation and visualization of secondary processing of meteor velocities and other parameters
		112	Nicholas	Moskovitz	Meteorite Parent Bodies in the Near-Earth Object Population
		113	Evgeniya V.	Petrova	Fusion crust: from the initial meteoroid matter to the observation spectrum
		114	Derek	Poulton	Global Meteor Network - Australia
		115	Jun Christian	Saniel	A New Fireball Detection Pipeline via Machine Learning and Supercomputing
		116	Maximilian	Vovk	WMPGang SkyShield: An Interactive Web App for Near-Earth Object and Meteoroid Risk Visualization
		117	Miro	Ronac Giannone	The relationship between bolide flight parameters and infrasound detection rates
		118	Elizabeth A.	Silber	Computational framework for classifying bolide fragmentation dynamics
		119	Elizabeth A.	Silber	Entry geometry effects on infrasound detection of meteoroids and space debris