

Day 1	Monday	5 May, 2025		
Start	Duration			Speaker / Presenter
9:00	0:30		Registration, Badge Collection, & Poster Set-up	
9:30	0:05		Welcoming Remarks from PDC Chairs	Brent Barbee
9:35	0:05		Welcoming Remarks from the Mayor of Stellenbosch	Jeremy Fasser
9:40	0:10		Local Organizing Committee & 4IAA Overview	Sias Mostert
9:50	0:05		Welcoming Remarks from the Host - SANSa (CEO)	Humbulani Mudau
9:55	0:15		Keynote Address 1: International Aspects	Lindley N. Johnson
10:10	0:15		Keynote Address 2: Regional Aspects	Humbulani Mudau
10:25	0:25		COFFEE BREAK	
			Panel Session 1: Setting the Stage: International Collaborations and 2024 YR4 (Panelists: Kelly Fast, NASA's Acting Planetary Defense Officer and Coordinating Officer for the International Asteroid Warning Network (IAWN); Romana Kofler, Programme Officer for Planetary Defense in the United Nations Office of Outer Space Affairs (UNOOSA); Detlef Koschny, Professor at the Technical University of Munich and Chair on Behalf of ESA for the Space Mission Planning Advisory Group (SMPAG); Richard Moissl, Head of ESA's Planetary Defense Office; John Shaw, Retired Deputy Commander of the United States Space Command (USSPACECOM); Matthew Daniels, Former Assistant Director for Space Security and Special Projects for the White House Office of Science and Technology (OSTP))	Speaker / Presenter
10:50	0:05		IAWN / SMPAG Overview	Kelly Fast / Detlef Koschny
10:55	0:30		2024 YR4 Event Summary + Q&A	Davide Farnocchia & Maxime Devogele
11:25	1:00		Panel Session + Q&A	Kelly Fast (Moderator)
12:25	1:00		LUNCH	
			2025 PDC Hypothetical Asteroid Impact Exercise (Panelists: Humbulani Mudau, CEO, SANSa; David Ngindu, Director-General, Centre National de Télédétection, DRC; Anderson Banda, Director of SADC Humanitarian and Emergency Operations Centre (SHOC), Nascala, Mozambique; Lindley Johnson, Planetary Defense Officer, NASA PDCO; Marco Castronuovo, Head of the Observation and Surveillance Office, ASI; Johan Minnie, (Head of Centre): Disaster Management at the City of Cape Town; Clement Kalonga, United Nations Disaster Assessment and Coordination (UNDAC)/INSARAG focal point for OCHA ROSEA; Lorant Czaran, Head of	Speaker / Presenter
13:25	2:15		Panel 1a: Notification of asteroid impact threat and early preparedness	Kelly Fast, Davide Farnocchia, Lorien Wheeler, Detlef Koschny (Moderator: Terik Daly)
15:40	0:25		COFFEE BREAK	
16:05	2:00		Panel 1b: Acting on results from an information-gathering space mission	Kelly Fast, Nancy Chabot, Lorien Wheeler, Detlef Koschny (Moderator: Terik Daly)
18:05			End of Conference Day 1	
18:05	3:00		Welcome Reception + Poster Viewing	

Day 1	Monday	5 May, 2025		
21:05			End of Welcome Reception	

Day 2	Tuesday	6 May, 2025			
Start	Duration	Abstract #		Speaker / Presenter	
9:00	0:05		Welcoming Remarks	Gerhard Drolshagen	
			Session 1: Hypothetical Threat Exercise Technical Session	Speaker / Presenter	Paper Number
9:05	0:08	17	The international response of space agencies to the PDC 2025 exercise - the 'SMPAG exercise' - lessons learned	Detlef Koschny	IAA-PDC-25-01-17
9:13	0:08	130	Overall Results of the SMPAG Work Package on Mission Scenarios in Response to the 2025 Planetary Defense Conference Hypothetical Asteroid Impact Threat Scenario	Juan Luis Cano	IAA-PDC-25-01-130
9:21	0:08	87	NASA Analysis of Space Mission Options for the 2025 Planetary Defense Conference Hypothetical Asteroid Impact Threat Scenario	Brent Barbee	IAA-PDC-25-01-87
9:29	0:08	83	Retasking In-flight Spacecraft for Rapid Response Reconnaissance in Planetary Defense Exercises	Justin Atchison	IAA-PDC-25-01-83
9:37	0:08	212	Analysis Of Asteroid Deflection Mission Options For The 2025 Planetary Defense Conference Hypothetical Asteroid Impact Threat Scenario By The Italian Space Agency Delegation At SMPAG	Saverio Franzese & Elena Basile	IAA-PDC-25-01-212
9:45	0:20		Q&A / Discussion		
10:05	0:25		COFFEE BREAK		
10:30	0:08	101	ESA NEOCC: Impact Assessment of 2024 PDC25	Marco Fenucci	IAA-PDC-25-01-101
10:38	0:08	221	The effect of prior knowledge on planetary defense scenario risk assessments	Jessie Dotson	IAA-PDC-25-01-221
10:46	0:08	136	Uncertainty Effects from an Asteroid Risk Assessment Perspective for the PDC25 Impact Scenario	Ashley Coates	IAA-PDC-25-01-136
10:54	0:08	217	Simulation of PDC 2025 Asteroid Entry, Terrestrial Impacts, Hazard and Consequences with Emphasis on South Africa's Stellenbosch & False Bay Communities	Souheil Ezzedine	IAA-PDC-25-01-217
11:02	0:08	242	Multi-Parameter Monitoring of the Potential Impact of the Exercise Asteroid 2024 PDC25	Christian Koeberl	IAA-PDC-25-01-242
11:10	0:20		Q&A / Discussion		
11:30	1:00		Panel Session 2: International Disaster Management for Planetary Defense (Panelists: Anderson Banda, Director of SADC Humanitarian and Emergency Operations Centre (SHOC), Nacala, Mozambique; Ademuyiwa OYEWUMI, Assistant Director/Head, Hazard & Disaster Management Division, NASRDA, Nigeria; Clement Kalonga, UNDAC/INSARAG focal point for OCHA ROSEA; James W. Nyaga, Project Lead, Early Warning, Anticipatory Actions and DRR Activities, Regional Centre for Mapping of Resources for Development (RCMRD), Nairobi, Kenya; Joerg Szarzynski, Head of GLOMOS Programme, and official active member of United Nations Disaster Assessment and Coordination (UNDAC) Team UNDAC / OCHA environment)	Panel Chairs: L. A. Lewis, ex. FEMA & Lorant Czarar, UN-SPIDER/UNOOSA	
12:30	1:00		LUNCH		
			Session 2: Ongoing and Upcoming Space Mission Highlights	Speaker / Presenter	Paper Number
13:30	0:15	132	The ESA Hera mission to Asteroid (65803) Didymos: On route to its target	Michael Küppers	IAA-PDC-25-02-132
13:45	0:15	181	Radar tomography of asteroid deep interior. JuRa / HERA to Didymos and the Radar to APOPHIS	Alain Herique	IAA-PDC-25-02-181
14:00	0:15	149	The ESA RAMSES mission: A rendezvous with the asteroid Apophis during its close encounter with Earth in 2029	Patrick Michel	IAA-PDC-25-02-149
14:15	0:15	41	OSIRIS-APEX Operations at Apophis	Anjani Polit	IAA-PDC-25-02-41
14:30	0:15	153	Planetary Defense Activities in JAXA	Makoto Yoshikawa	IAA-PDC-25-02-153
14:45	0:15	54	Science operation planning for Hayabusa2#'s flyby at Asteroid (98943) Torifune	Masatoshi Hirabayashi	IAA-PDC-25-02-54
15:00	0:15	67	NEOMIR: Project Status Of ESA's Space-Based Infrared Mission For NEO Detection Early Warning	Luca Conversi	IAA-PDC-25-02-67
15:15	0:25		Q&A / Discussion		
15:40	0:25		COFFEE BREAK		
			Session 3: Apophis T-4 Years	Speaker / Presenter	Paper Number
16:05	0:08	118	3D shape model and spin state of 99942 Apophis estimated from 2013 radar and lightcurve data	Marina Brozovic	IAA-PDC-25-03-118
16:13	0:08	205	Spin state of Apophis - predicting its orientation during and after the 2029 flyby	Josef Durech	IAA-PDC-25-03-205
16:21	0:08	106	Modeling Apophis as a Bi-Lobate Rubble Pile Body using Contact Dynamics	Daniel Scheeres	IAA-PDC-25-03-106
16:29	0:08	128	The Effect of Irregular Constituent Particle Shape and Internal Structure on the Anticipated Physical Outcomes of the Apophis 2029 Close Encounter	Joseph DeMartini	IAA-PDC-25-03-128
16:37	0:08	109	Estimating the effect of Apophis' close approach on Earth's satellites.	Marta Ceccaroni	IAA-PDC-25-03-109
16:45	0:08	39	Near-Future Plans for IAWN Apophis Observing Campaigns	James Bauer	IAA-PDC-25-03-39
16:53	0:08	238	Rapid Apophis Characterization with Two Satellites (RA's CATS): Residual Mission Benefit for NEO Tracking and Characterization	Nathan Golovich	IAA-PDC-25-03-238
17:01	0:08	227	Leveraging Cislunar Orbits For The Upcoming Apophis Encounter	Fazle Siddique	IAA-PDC-25-03-227
17:09	0:08	235	The Caltech Mission to Characterize Apophis	Carol Raymond	IAA-PDC-25-03-235
17:17	0:08	139	Apophis 2029: Advancing Planetary Science and Planetary Defense with the Caltech Mission	Adriana Daca	IAA-PDC-25-03-139
17:25	0:08	133	TERP RAPTOR (Terrapin Engineered Rideshare Probe for Rapid-response Asteroid Apophis Profiling, Tracking, Observing, and Reconnaissance): Mission Concept Development	Adrienne Rudolph	IAA-PDC-25-03-133

17:33	0:08	170	Low energy multi-impact experiments on (99942) Apophis	Shogo Tachibana	IAA-PDC-25-03-170
17:41	0:08	88	Apophis Kinetic Impact Test And Cratering Experiment After Its Close Approach To The Earth	Kevin Walsh	IAA-PDC-25-03-88
17:49	0:26		Q&A / Discussion		
18:15			End of Conference Day 2		
18:15	2:00		Poster Viewing (w/ wine/cheese pairing)		
20:15			End of Poster Viewing		

Day 3 Wednesday 7 May, 2025					
Start	Duration	Abstract #		Speaker / Presenter	
9:00	0:05		Welcoming Remarks	Alex Karl	
Session 4: Near-Earth Object (NEO) Discovery				Speaker / Presenter	Paper Number
9:05	0:08	148	The Pan-STARRS Search for Near-Earth Objects: 10+ Years old and going strong	Richard Wainscoat	IAA-PDC-25-04-148
9:13	0:08	146	Modern computational techniques for improving moving object detection pipelines with the Catalina Sky Survey	Carson Fuls	IAA-PDC-25-04-146
9:21	0:08	158	NEO Surveys Doing More With More: Optimized Scheduling And Object Search For Multi-Observatory Operations	Larry Denneau	IAA-PDC-25-04-158
9:29	0:08	126	ESA's Planetary Defence Office NEO Survey Strategy	Rainer Kresken	IAA-PDC-25-04-126
9:37	0:08	204	Imminent impactor discoveries from Hungary: recent results and lessons learnt	Krisztian Sarneczky	IAA-PDC-25-04-204
9:45	0:08	42	How Much Warning Time for Asteroid Impacts Will We Have in the Vera Rubin Era?	Kathleen Kiker	IAA-PDC-25-04-42
9:53	0:08	129	2024 Schweickart Prize Winning Proposal: The Sunward NEO Surveillance and Early Twilight Detection (SUNSET) Collaboration	Joseph DeMartini	IAA-PDC-25-04-129
10:01	0:11		Q&A / Discussion		
10:12	0:08	191	Minor Planet Center Updates and New Developments	Federica Spoto	IAA-PDC-25-04-191
10:20	0:08	144	Machine learning improvement of the Near Earth Object discovery process	Peter Veres	IAA-PDC-25-04-144
10:28	0:08	163	Identifying potential NEOs based on their single-tracklet motion	Robert Weryk	IAA-PDC-25-04-163
10:36	0:08	114	How many 1km NEAs are there? A critical revision of different estimates	Gonzalo Tancredi	IAA-PDC-25-04-114
10:44	0:08	74	2032 And 2036 Risk Enhancement From NEOs In The Taurid Stream	Mark Boslough	IAA-PDC-25-04-74
10:52	0:08	220	Predicted Discovery Of Low-Delta V Targets Among The NEO Population By NEO Surveyor	Paul Abell	IAA-PDC-25-04-220
11:00	0:10		Q&A / Discussion		
11:10	0:25		COFFEE BREAK		
11:35	1:00		Panel Session 3: International Year of Asteroid Awareness and Planetary Defence, 2029 (Panelists: Kelly Blumenthal, IAU Office of Astronomy Outreach; Charles Takaiana, IAU Office of Astronomy Development; Kevin Govender, IAU Office of Astronomy Development; Lars Christensen, NOIRLAB; Amy Kaminski, NASA Science Mission Directorate)	Panel Chairs: Doris Daou, Romana Kofler, Bill Ailor	
12:35	1:00		LUNCH		
Session 5: Near-Earth Object (NEO) Characterization				Speaker / Presenter	Paper Number
13:35	0:10	97	IAWN Planetary Defense Campaigns	Michael Kelley	IAA-PDC-25-05-97
13:45	0:10	60	JWST As a Tool for Early Characterization of Potential Impactors	Andrew Rivkin	IAA-PDC-25-05-60
13:55	0:10	102	Follow-up Activities and Developments from ESA's Planetary Defence Office	Marco Micheli	IAA-PDC-25-05-102
14:05	0:10	145	Status of Near-Earth Asteroid Radar Observations at Goldstone	Marina Brozovic for Lance B	IAA-PDC-25-05-145
14:15	0:10	20	The Rapid-Response Fully-Automated NEA Follow-Up Program with the SAAO's 1-m Lesedi Telescope	Thobekile Sandra Ngwane	IAA-PDC-25-05-20
14:25	0:10	56	Investigation of Near-Earth Objects Using the 1.88m Telescope at NRIAG, Egypt	Ahmed Moursi	IAA-PDC-25-05-56
14:35	0:25		COFFEE BREAK		
15:00	0:10	161	Characterization of High Priority NEOs from the 4.3-m Lowell Discovery Telescope (LDT)	Nicholas Moskovitz	IAA-PDC-25-05-161
15:10	0:10	86	Measuring the Menace: Advances in Determining the Size of Hazardous Near-Earth Objects	Maxime Devogele	IAA-PDC-25-05-86
15:20	0:10	184	Physical Characterization of Potentially Hazardous Asteroid (1566) Icarus	Eric Maclennan	IAA-PDC-25-05-184
15:30	0:10	202	Tidal disruptions increase the number of asteroids on Earth-crossing orbits	Mikael Granvik	IAA-PDC-25-05-202
15:40	0:10	222	A Near-Earth Object Model Calibrated to Earth Impactors	Sophie Deam	IAA-PDC-25-05-222
15:50	0:10	243	Review of instrumentally recorded meteorite falls as geological hand specimens of asteroid families	Peter Jenniskens	IAA-PDC-25-05-243
16:00			End of Conference Day 3		

Day 4	Thursday	8 May, 2025			
Start	Duration	Abstract #		Speaker / Presenter	
9:00	0:05		Welcoming Remarks	Nahum Melamed	
			Session 6: Deflection / Disruption Modeling & Testing	Speaker / Presenter	Paper Number
9:05	0:08	112	A Gravity Tractor Mission Concept to a Binary Asteroid	Ronald-Louis Ballouz	IAA-PDC-25-06-112
9:13	0:08	115	The post-DART heliocentric orbit of Didymos and implications for the effectiveness of the DART impact	Steven Chesley	IAA-PDC-25-06-115
9:21	0:08	107	Designer Asteroids: Using experiments to better understand the effect of asteroid structure on momentum enhancement	Angela Stickle	IAA-PDC-25-06-107
9:29	0:08	33	The Influence of Micro- vs. Macroporosity in the Deflection of Rubble-Pile Asteroids	Sean Wiggins	IAA-PDC-25-06-33
9:37	0:08	52	Hypervelocity Cratering and Disruption of Three L-Type Ordinary Chondrites	George Flynn	IAA-PDC-25-06-52
9:45	0:08	231	Pulverize It (PI): Intentional robust disruption (IRD) for multi-modal planetary defense	Brin Bailey	IAA-PDC-25-06-231
9:53	0:08	72	Experimental Calibration of X-Ray Energy Deposition Models for Planetary Defense with the OMEGA Laser	Patrick King	IAA-PDC-25-06-72
10:01	0:08	94	Nuclear Deflection of Kilometer-Scale Asteroids Simulated using Sandia's Z Machine	Nathan Moore	IAA-PDC-25-06-94
10:09	0:08	229	Options and Uncertainties for Nuclear Mitigation in the 2025 Hypothetical Asteroid Threat Exercise Scenario	Catherine Plesko	IAA-PDC-25-06-229
10:17	0:08	24	Simulating Asteroid Deflection and Disruption Using an X-Ray Energy Deposition Model in SPH	Isaiah Santistevan	IAA-PDC-25-06-24
10:25	0:15		Q&A / Discussion		
10:40	0:25		COFFEE BREAK		
			Session 7: Space Mission & Campaign Design	Speaker / Presenter	Paper Number
11:05	0:08	140	A 2025 Update to the Asteroid Mitigation Response Plot	Paul Chodas	IAA-PDC-25-07-140
11:13	0:08	58	Developing A Robust Flyby Reconnaissance Capability For Planetary Defense	Nancy Chabot	IAA-PDC-25-07-58
11:21	0:08	46	Design Constraints For Asteroid Deflection Campaigns Based On Delta-V Estimation Timelines	Rahil Makadia	IAA-PDC-25-07-46
11:29	0:08	36	Look Before You Leap: Approaches For Rapid Response Reconnaissance Of NEOs	Benjamin Donitz	IAA-PDC-25-07-36
11:37	0:08	40	TREx: A Temporarily-Captured Orbiter Rendezvous Explorer & In-Situ Characterization Mission	Arthur Chadwick & Adrienne Rudolph	IAA-PDC-25-07-40
11:45	0:08	197	The ANIME mission concept: exploring three near-Earth asteroids with a CubeSat	Davide Perna	IAA-PDC-25-07-197
11:53	0:08	104	Novel Reutilization of the European Service Module in Service of Planetary Defense	Lorraine Fesq	IAA-PDC-25-07-104
12:01	0:08	57	Grabbing a sample from a real Near-Earth Asteroid (NEA): A very fast Sample Return Mission opportunity	Martin Hilchenbach	IAA-PDC-25-07-57
12:09	0:08	223	Apophis Pathfinder: An Innovative Milo Space Science Institute Smallsat Mission for Initial Planetary Defense and Scientific Characterization of PHA (99942) Apophis	Jim Bell	IAA-PDC-25-07-223
12:17	0:08	210	Trajectory and CubeSat Mission Design for Plasma Physics Observations during the 2029 Apophis Flyby	Lucas Barbero Sanchez	IAA-PDC-25-07-210
12:25	0:08	239	Ion-Beam Deflection Missions for the 2024 PDC25 Scenario	Paul Chodas	IAA-PDC-25-07-239
12:33	0:12		Q&A / Discussion		
12:45	1:00		LUNCH		
			Session 8: Earth Impact Effects & Consequences	Speaker / Presenter	Paper Number
13:45	0:10	28	Spherical Simulations of the Atmospheric Entry and Energy Deposition of PDC25 Threat Scenario Asteroids	Evan Bjornnes	IAA-PDC-25-08-28
13:55	0:10	43	A New Hydrocode Pipeline for Assessing Ground Effects of Chelyabinsk- to Tunguska-Sized Asteroid Airbursts	Veronika Korneyeva	IAA-PDC-25-08-43
14:05	0:10	73	Airburst & Blast Damage Risk Modeling Trends for the PDC25 Impact Scenario	Lorien Wheeler	IAA-PDC-25-08-73
14:15	0:10	63	High-Fidelity Blast Propagation for PDC25 Impact Scenarios	Michael Aftosmis	IAA-PDC-25-08-63
14:25	0:10	25	Asteroid-induced climate coupled cascading hazards along an asteroid risk corridor.	Timothy Titus	IAA-PDC-25-08-25
14:35	0:10	18	Coupled Radiation-Hydrocode Predictions of Thermal and Blast Damage for PDC25	Darrel Robertson	IAA-PDC-25-08-18
14:45	0:20		Q&A / Discussion		
15:05	0:25		COFFEE BREAK		
			Session 9: The Decision to Act: Political, Legal, Social, and Economic Aspects	Speaker / Presenter	Paper Number
15:30	0:08	245	Value Focused Thinking for Planetary Defense Strategy in Brazil	Ana Lucia Pegetti	IAA-PDC-25-09-245
15:38	0:08	183	Roadmap to the Planetary Defense Multilateral Security Regime	Nikola Schmidt	IAA-PDC-25-09-183
15:46	0:08	175	Towards a Global Governance Framework for Planetary Defense	Anubhav Gupta	IAA-PDC-25-09-175
15:54	0:08	10	Expanding Our Planetary Defense Umbrella to Cislunar Space	Jan Osburg	IAA-PDC-25-09-10

16:02	0:08	207	Legal and Policy Considerations for Multi-Action Deflection	Brent Barbee	IAA-PDC-25-09-207
16:10	0:08	233	Protocols for Use of a Nuclear Explosive Device	Matthew Daniels	IAA-PDC-25-09-233
16:18	0:08	261	On the Legality of Any Other Nuclear Explosion	Hannes Mayer	IAA-PDC-25-09-261
16:26	0:08	259	Geopolitical, Socio-Economic, and Legal Aspects of the 2024PDC25 Event	Rudolf Albrecht	IAA-PDC-25-09-259
16:34	0:31		Q&A / Discussion		
17:05			End of Conference Day 4		
18:30			Dinner Transfers		
19:00			Gala Dinner		

Day 5	Friday	9 May, 2025			
Start	Duration	Abstract #		Speaker / Presenter	
9:00	0:05		Welcoming Remarks	Romana Kofler	
9:05	1:00			Panel Chair: Alex Karl	
			Session 10: Public Education and Communication	Speaker / Presenter	Paper Number
10:05	0:10	5	Developing a "Planetary Defense Decisionmaker Guide"	Jan Osburg	IAA-PDC-25-10-5
10:15	0:10	30	Creating A Communications Kit For Future Asteroid Threats	Lori Pigue	IAA-PDC-25-10-30
10:25	0:10	189	Asteroid impacts or social media misinformation – what's worse? Introducing an effective media communication strategy for planetary defense	Alex Karl	IAA-PDC-25-10-189
10:35	0:10	75	Preventing And Correcting Spread Of Misinformation About Neos, Impacts, Airbursts, And Planetary Defense	Mark Boslough	IAA-PDC-25-10-75
10:45	0:10	240	The Virtual Telescope Project: a unique resource in near-Earth object outreach and education	Gianluca Masi	IAA-PDC-25-10-240
10:55	0:10	100	Advancing Astronomy Education and Space Science through the Asteroid Search Campaign at the Kenya Space Agency	Harold Safary	IAA-PDC-25-10-100
11:05	0:10	4	The Day After Forward-Looking Ethical Lessons From Apophis' Passage	Jacques Arnould	IAA-PDC-25-10-4
11:15	0:10	255	Education, Outreach and Heritage on a global scale	Edward Gomez	IAA-PDC-25-10-255
11:25	0:20		Q&A / Discussion		
11:45	0:15		COFFEE BREAK		
12:00	1:30		Wrap-up		
13:30			End of Conference		

Posters - Session 1: Hypothetical Threat Exercise Technical Session

	<u>Abstract Number</u>	<u>Title</u>	<u>POC Author Name</u>	<u>Paper Number</u>
1	68	Using the NEO Size-Frequency Distribution in Probabilistic Assessments	Andrew Rivkin	IAA-PDC-25-01-68
2	70	Lamb Wave Driven Tsunami Damage Quantification Along the 2025 PDC Risk Corridor	Mark Boslough	IAA-PDC-25-01-70
3	91	Nuclear Electric Propulsion for Planetary Defense	Steven Oleson	IAA-PDC-25-01-91
4	135	Trajectory optimization for deflection of asteroid 2024 PDC25 using genetic algorithms and departure via lunar swing-bys	Rebeca Ribeiro	IAA-PDC-25-01-135
5	160	Exhaustive search of gravity assist trajectories for rapid reconnaissance and deflection of fictitious asteroid PDC2025	Miguel Gavira-Aladro	IAA-PDC-25-01-160
6	201	Concept of Operations for a Rendezvous Reconnaissance Mission to an Identified Asteroid Threat: The First Step Towards Deflection	Dhanisha Sateesh	IAA-PDC-25-01-201
7	211	Impulsive and Slow-push Mitigation Options for 2025 PDC Hypothetical Asteroid Impact Scenario	Yirui Wang; Jinglang Feng	IAA-PDC-25-01-211

Posters - Session 2: Ongoing and Upcoming Space Mission Highlights

	Abstract Number	Title	POC Author Name	Paper Number
1	35	Data Products From The OSIRIS-APEX Mission to Apophis	Michael C. Nolan	IAA-PDC-25-02-35
2	38	Planetary defence implications of the OSIRIS-APEX mission	James Roberts	IAA-PDC-25-02-38
3	176	Thermal Infrared Imager TIRI onboard Hera and RAMSES missions	Tatsuaki Okada	IAA-PDC-25-02-176
4	199	Satis: a fast-response ESA Planetary defence mission	Özgür Karatekin	IAA-PDC-25-02-199
5	254	French involvement in Planetary Defense Missions	Pierre Bousquet	IAA-PDC-25-02-254

Posters - Session 3: Apophis T-4 Years

	<u>Abstract Number</u>	<u>Title</u>	<u>POC Author Name</u>	<u>Paper Number</u>
1	12	Towards angular and rotation tracking of Apophis with Meade telescope in 2029: Citizen science tracking ISS and presenting on public education site	Aron Wolf Siegel	IAA-PDC-25-03-12
2	138	Apophis 2029: Synergy between Numerical Models and Radar Tomography Data from the Caltech Mission	Adriana Daca	IAA-PDC-25-03-138

Posters - Session 4: Near-Earth Object (NEO) Discovery

	Abstract Number	Title	POC Author Name	Paper Number
1	21	NEA observations with the World's Biggest Schmidt Telescope	Bringfried Stecklum	IAA-PDC-25-04-21
2	27	SSAU's Activities in NEO Observations in 2019–2024	Oleksandr Kozhukhov	IAA-PDC-25-04-27
3	84	Rapid Pre-discovery of Near-Earth Objects	Tam Nguyen	IAA-PDC-25-04-84
4	89	Near-Earth Object (NEO) Discovery	Kibrop Webber	IAA-PDC-25-04-89
5	103	NEO Detection Using Image Stacking Method Implemented in Celestial Coordinates	Diana Haritonova	IAA-PDC-25-04-103
6	110	Pre-Impact Detection of Chelyabinsk-Type Objects in the Thermal Infrared	Thomas Mueller	IAA-PDC-25-04-110
7	111	Assessing the Vulnerabilities of the Meerkat Asteroid Guard	Charlie Drury	IAA-PDC-25-04-111
8	113	Current Status of ESA's Flyeye Telescopes	Dora Fohring	IAA-PDC-25-04-113
9	119	System of Observation of Daytime Asteroids (SODA)	Andrey Shugarov	IAA-PDC-25-04-119
10	147	Machine Learning assisted NEO Discovery and Polarimetric Characterization with Astronomical Surveys	Gijs Verdoes Kleijn	IAA-PDC-25-04-147
11	151	ATLAS-Teide: A Modular and Cost-Effective Upgrade to the ATLAS network	Javier Licandro	IAA-PDC-25-04-151
12	155	Convolutional Neural Networks To Improve the Discovery of Near-Earth Asteroids in the Zwicky Transient Facility	Belén Yu Irureta-Goyena	IAA-PDC-25-04-155
13	162	Real-time Discovery of Near-Earth Objects via Accelerated Image Analysis with AI Methods	Laszlo Kiss; Krisztian Sarneczky	IAA-PDC-25-04-162
14	164	Potentially Hazardous Asteroids and Tunguska-Sized Objects in the Taurid Resonant Swarm	Quanzhi Ye	IAA-PDC-25-04-164
15	182	Mission Planning Methods for Space-Based Monitoring of Hazardous Near-Earth Objects	Peiran Mu	IAA-PDC-25-04-182
16	200	Capabilities of Independent Company 6ROADS Through a Global Network of Telescopes and Innovative Sensors	Michał Żołnowski	IAA-PDC-25-04-200
17	215	Discovering Near-Earth Asteroids With the Bok NEO Survey	Melissa Brucker	IAA-PDC-25-04-215
18	230	Measuring Asteroid Distances from a Single Observatory in One Night with Upcoming All-Sky Telescopes	Maryann Benny Fernandes	IAA-PDC-25-04-230
19	253	Non-Governmental NEO Discovery International Programs Including the Astrometrica Software	Nancy C. Wolfson	IAA-PDC-25-04-253

Posters - Session 5: Near-Earth Object (NEO) Characterization

	Abstract Number	Title	POC Author Name	Paper Number
1	13	A model based approach to asteroid detection and characterisation using bistatic continuous wave radar	Edwin Peters	IAA-PDC-25-05-13
2	14	Radar and optical tracking of Near-Earth Objects at the University of Tasmania	Guifre Molera Calves	IAA-PDC-25-05-14
3	19	Near-Earth Asteroid Follow-up Observations at the SAAO	Nicolas Erasmus	IAA-PDC-25-05-19
4	26	A rapid-response program to characterize Near Earth Objects with LCO's MuSCAT instruments	David Trilling	IAA-PDC-25-05-26
5	34	Analysis of Bennu's Density Distribution Using Recent Mission Data	Ashish Cavale	IAA-PDC-25-05-34
6	44	Near-Earth asteroid regolith properties from thermal mm-wavelength observations	Timothy Titus	IAA-PDC-25-05-44
7	59	An IAWN Comet Campaign	James Bauer	IAA-PDC-25-05-59
8	62	Mass Measurement Techniques for High-Speed Flyby Reconnaissance Missions of Potentially Hazardous Asteroids	Justin Atchison	IAA-PDC-25-05-62
9	64	Infrared Photometry for Near-Earth Objects From Spitzer – the Full Sample	Andrew McNeill	IAA-PDC-25-05-64
10	76	Rapid-Defender: A New Polarimeter for Planetary Defense	Estela Fernandez-Valenzuela	IAA-PDC-25-05-76
11	85	The Aegis orbit determination and impact monitoring system architecture	Francesco Gianotto	IAA-PDC-25-05-85
12	90	NEAs photometric survey from Loiano Astronomical Station	Albino Carbognani	IAA-PDC-25-05-90
13	93	A New Program for Rotational Characterization of Near-Earth Objects	Adam Battle	IAA-PDC-25-05-93
14	99	Astrometry, orbit determination, and thermal inertia of the Tianwen-2 target asteroid (469219) Kamo'oalewa	Marco Fenucci	IAA-PDC-25-05-99
15	108	Lightcurve Analysis of Imminent Impactors for Planetary Defense Using Innovative Trail Technique	Maxime Devogele	IAA-PDC-25-05-108
16	122	Micrometers Regolith Grain Size Properties Inferred by Laboratory Infrared Observation and their Implication for Planetary Protection	Giovanni Poggiali	IAA-PDC-25-05-122
17	156	Rapid Reconnaissance and Characterization of Potentially Hazardous Asteroids and Comets with Solar Sailcraft	John McVey	IAA-PDC-25-05-156
18	168	Raining Fire: Meteoroid Characterisation based on Ballistic Trajectory Analysis	Thomas Stevenson	IAA-PDC-25-05-168
19	171	The potentially hazardous binary asteroid (285263) 1998 QE2	Flaviane Venditti	IAA-PDC-25-05-171
20	177	Sensitivity of surface modification to seismic waves in rubble-pile asteroids	Eric Frizzell	IAA-PDC-25-05-177
21	180	Stellar Occultations: a powerful Citizen science contribution to planetary defence	Damyia Souami	IAA-PDC-25-05-180
22	185	Space to Lab Asteroid Studies with Imminent Impactors in the LSST era	Hadrien Devillepoix	IAA-PDC-25-05-185
23	186	Enhancing Near earth object detection and characterization by optimizing ground based technology and small satellite constellations	Mahima Gehlot	IAA-PDC-25-05-186
24	187	Prevalence of Fast Rotators in Small Near-Earth Asteroids: An Ongoing Survey from the Canary Island Observatories	Miguel R. Alarcon	IAA-PDC-25-05-187
25	188	Mass ejection by fast-spinning Didymos: orbiting dust and transference to Dimorphos	Adriano Campo Bagatin	IAA-PDC-25-05-188
26	195	Investigating the effect of aggregate parameters on the macro-scale properties of rubble-rile asteroids	Irina Luciana San Sebastián	IAA-PDC-25-05-195
27	196	Overview of NEO-related research by the Planetary Science Team at University of Alicante (Spain)	Adriano Campo Bagatin	IAA-PDC-25-05-196
28	203	Dust Dynamics Simulations Using LICIAcube Observations in Preparation for the Hera Mission Science	Stavro Ivanovski	IAA-PDC-25-05-203
29	209	Probing shape, spin, and absolute magnitude: A comprehensive study of thirteen asteroids with MOID less than 1 AU	Kristers Nagainis	IAA-PDC-25-05-209
30	218	Classification of Potentially Hazardous Asteroids with High-Phase Angle MOPTOP/LT Polarimetry	Rosie Wilson	IAA-PDC-25-05-218
31	228	Impact probability predictions for 2024 PDC25 via jet transport techniques	Luis E. Ramírez Montoya	IAA-PDC-25-05-228
32	244	Search for potentially hazardous long-period comets based on the projection of their meteoroid streams	Peter Jenniskens	IAA-PDC-25-05-244
33	247	Statistical analysis of the observatory performances	Karolina Dziadura	IAA-PDC-25-05-247
34	248	Southern Hemisphere Asteroid Radar Program (SHARP)	Shinji Horiuchi	IAA-PDC-25-05-248
35	249	Southern Hemisphere Asteroid Research Consortium for Support to Planetary Defence	Ed Kruzins	IAA-PDC-25-05-249
36	250	Radar Observation of Asteroids 2005 LW3 and 2006 WB with European Radio Telescopes	Giuseppe Pupillo	IAA-PDC-25-05-250
37	251	On the parameters of NEO encounters with the Earth	Roman Zolotarev	IAA-PDC-25-05-251

Posters - Session 6: Deflection / Disruption Modeling & Testing

	Abstract Number	Title	POC Author Name	Paper Number
1	16	Optimizing Trajectories in Asteroid Defense Missions: Potential Gains from Eccentric Collision Approaches	Kin Thong Lee	IAA-PDC-25-06-16
2	29	Quantifying Uncertainties in Modeling Choices for Time-Sensitive Applications	Wendy K. Caldwell	IAA-PDC-25-06-29
3	37	Probing Nuclear-Initiated Robust Disruption in Mesh-Based Simulations	Mary Burkey	IAA-PDC-25-06-37
4	45	Analytic NEO Deflection Formula Update and Expansion	Robert Managan	IAA-PDC-25-06-45
5	66	The catastrophic disruption threshold of 50-100 m asteroids: laboratory experiments, numerical simulations, and application to the PDC2025 scenario	Ronald-Louis Ballouz	IAA-PDC-25-06-66
6	77	Probing heuristics for the kinetic disruption of asteroids	Kathryn Kumamoto	IAA-PDC-25-06-77
7	92	A Metric for Gravity Tractor Effectiveness	Colby Merrill	IAA-PDC-25-06-92
8	117	A Safe and Effective Nuclear Deflection Device for Planetary Defense	Bradley Salzbrenner	IAA-PDC-25-06-117
9	125	How Asteroid Composition Changes the Effectiveness of Nuclear Deflection and Disruption Missions	Thomas Onyango	IAA-PDC-25-06-125
10	137	Momentum Enhancement of Rubble Pile Simulants at 2 and 5.5 km/s	James Walker	IAA-PDC-25-06-137
11	150	LOSSOL: Line of Sight Speed of Light Directed Energy Technologies for Planetary Defense	Madhu Thangavelu	IAA-PDC-25-06-150
12	159	On the Design Possibilities of a Non-Traditional Nuclear Device for Planetary Defense	Russell TerBeek	IAA-PDC-25-06-159
13	166	Technologies for Asteroid Deflection: Strategies and Challenges	Oluwatosin Kolade	IAA-PDC-25-06-166
14	167	Asteroid Composition and Its Influence on Mitigation Strategies	Oluwatosin Kolade	IAA-PDC-25-06-167
15	173	Advancing Planetary Defense: Electromagnetic Forces for Non-Contact Asteroid Deflection	Anubhav Gupta	IAA-PDC-25-06-173
16	178	Modeling the influence of layering on impact-induced seismic waves in rubble-pile aggregates with GRAINS	Eric Frizzell	IAA-PDC-25-06-178
17	226	Mitigating the near-earth object threat: Comparative analysis of deflection and explosion	Mahima Gehlot	IAA-PDC-25-06-226
18	232	Hydrocode Simulations of Robust Asteroid Disruption via Hypervelocity Impacts	Alexander Cohen	IAA-PDC-25-06-232
19	241	Collisional Spin-Up of Asteroids: Alternative Mechanisms of Binary Asteroid Formation Independent of YORP Effects	Po-Yen Liu	IAA-PDC-25-06-241

Posters - Session 7: Space Mission & Campaign Design

	Abstract Number	Title	POC Author Name	Paper Number
1	6	PULSAR KINETIC IMPACT TECHNOLOGIES	Thomas Harris	IAA-PDC-25-07-6
2	31	Developing Asteroid Detection, Reconnaissance, and In-situ Scientific Discovery as a Platform for NEO Defense	Scott Perl	IAA-PDC-25-07-31
3	48	Advanced Technologies for Mitigating Hazardous Propellants and Gases Interterminal Liquid Stage of Near Earth Orbit Mission: Enhancing Planetary Defense	Krishna Kumar KV	IAA-PDC-25-07-48
4	61	The Accessibility of Potentially Hazardous Asteroids for Ballistic Rapid Reconnaissance Flyby Missions	Justin Atchison	IAA-PDC-25-07-61
5	65	HERA GNC flying towards Didymos and its adaptation to RAMSES	Andrea Pellacani	IAA-PDC-25-07-65
6	95	Apophis Observation by JAXA Operational Satellite	Toshinori Ikenaga	IAA-PDC-25-07-95
7	123	Research Progress on Small Celestial Body Flexible Landing	Zelong Chen	IAA-PDC-25-07-123
8	131	Opportunities for planetary defense with ESA's LUMIO mission	Eloy Peña-Asensio	IAA-PDC-25-07-131
9	134	Utilizing Gravity Assist Maneuvers for Asteroid Capture Into Moon-Resonant Earth Satellite Orbit	Olga Chernenko	IAA-PDC-25-07-134
10	141	Accessibility of Earth Impactors for Planetary Defense Rendezvous Missions	Matthew Vavrina	IAA-PDC-25-07-141
11	154	Autonomous Cooperative Navigation for Multi-Spacecraft Landing on Near-Earth Asteroids for Planetary Defense	Yilin Cao	IAA-PDC-25-07-154
12	172	Operationalizing the Didymos-Dimorphos Asteroid Test Site to Assess Additional Deflection Technologies	Nahum Melamed	IAA-PDC-25-07-172
13	179	Event-driven constellation mission design for in situ crater formation observation	Eric Frizzell	IAA-PDC-25-07-179
14	198	Establishment of International Asteroids Processing Space Station For Economic Feasible Space Mining For Extraction of Minerals and Rare Earth Metals And Minerals From Asteroids And Near Earth Objects For Green And Sustainable Energy With Early Achievement of "Net Zero" by 2075; By Application of An Instrumental Scientific Nonagon Model.	Abhinav Kumar Shrivastava	IAA-PDC-25-07-198
15	214	BASTET – A MASCOT-style Nanolander Investigating the Subsurface of Apophis, Seismicity, and Tidal Forces during Earth Encounter	Jan Thimo Grundmann	IAA-PDC-25-07-214
16	216	StarGrind & Armory Practice – Using Earth's Best Bad Habits as a Last Ditch Stand Against Short Warning Time NEO Impacts	Jan Thimo Grundmann	IAA-PDC-25-07-216
17	219	Designing Spacecraft Trajectories From Libration Point Orbit to Near-Earth Asteroids	Maxim Pupkov	IAA-PDC-25-07-219
18	223	Apophis Pathfinder: An Innovative Milo Space Science Institute Smallsat Mission for Initial Planetary Defense and Scientific Characterization of PHA (99942) Apophis	Jim Bell	IAA-PDC-25-07-223
19	257	Refining Asteroid Mass Uncertainty via Volume, Porosity, and Density Constraints for Optimal Flyby Mission Design	Melissa Buys	IAA-PDC-25-07-257
20	258	Rapid Response to an Imminent Threat	Joseph A Nuth	IAA-PDC-25-07-258

Posters - Session 8: Earth Impact Effects & Consequences

	Abstract Number	Title	POC Author Name	Paper Number
1	23	Potential post-impact downstream flooding hazards risk assessment	Timothy Titus	IAA-PDC-25-08-23
2	78	High-Fidelity Modeling of Asteroid Ocean Impacts: Understanding Tsunamis Generation and Atmospheric Responses	Lauren Abrahams	IAA-PDC-25-08-78
3	98	Ab initio strewn field for small asteroids impacts	Marco Fenucci	IAA-PDC-25-08-98
4	142	Scaling relations for vapor and ejecta production for NEO impacts onto the Earth	Robert Citron	IAA-PDC-25-08-142
5	190	Kinetic energy estimation of ton-TNT scale impacts based on well-known events	Simon Anghel	IAA-PDC-25-08-190
6	192	New evaluation of the morphology of the Kalkkop Crater, South Africa	Matthew Huber	IAA-PDC-25-08-192
7	225	Near-earth object impact risk assessment and framework for international collaboration for impact mitigation and post-recovery strategies	Mahima Gehlot	IAA-PDC-25-08-225

Posters - Session 9: The Decision to Act: Political, Legal, Social, and Economic Aspects

	<u>Abstract Number</u>	<u>Title</u>	<u>POC Author Name</u>	<u>Paper Number</u>
1	22	Rogue Space Actors: Is there a Problem in our Current Domestic Regimes that might allow for an unauthorised Planetary Defence Mission?	Judith Jahnke	IAA-PDC-25-09-22
2	143	Enabling Planetary Defense: Science, Law, Ethics	Madison Walker	IAA-PDC-25-09-143
3	152	Incorporating Planetary Defense into the "Post-SDGs", Speaker: Kenichi Kumagai	Kenichi Kumagai	IAA-PDC-25-09-152
4	246	Decisions to Swiftly Act in Planetary Defense and SETI are Similar	Claudio Maccone	IAA-PDC-25-09-246
5	260	Ethical Frameworks of Extramilitary Defense in Emerging Domains: Parallels in Cyber and Planetary Defense	Christopher Geiger	IAA-PDC-25-09-260
6	262	Space Debris and the Consequences of Planetary Defence Operations	Seenu Tiwari	IAA-PDC-25-09-262
7	265	Reconnaissance Missions to Near-Earth Object Impact Threats: A Pragmatic Approach	R. Terik Daly	IAA-PDC-25-09-265

Posters - Session 10: Public Education and Communication

	Abstract Number	Title	POC Author Name	Paper Number
1	121	Hypothetical Asteroid Impact Scenario - Event For Public	Jana Ticha	IAA-PDC-25-10-121
2	194	Engaging Students in Asteroid Search in Côte d'Ivoire	Kassamba Abdel Aziz Diaby	IAA-PDC-25-10-194
3	256	Sorvegliati Spaziali: Leveraging AR for Planetary Defense Awareness	Daria Guidetti	IAA-PDC-25-10-256

Posters - Session 11: Disaster Management & Impact Response

	Abstract Number	Title	POC Author Name	Paper Number
1	32	Global Supply Chain Exposure to Asteroid Impacts	Timothy Titus	IAA-PDC-25-11-32
2	105	Teaching Risk Management Through the Lens of Asteroids and Disaster Strategies	Felipe Cepeda	IAA-PDC-25-11-105
3	116	Risk Perception of Near-Earth Objects as Hazards: A Research Design	Lisa Wier	IAA-PDC-25-11-116