2024 NIAC SYMPOSIUM AGENDA

September 10-12, 2024

All Times Pacific Standard Time

DAY 1: Tuesday, September 10

Time (PST)	Event	Speaker
9:00 AM	***Special Address***	***TBD***
9:10 AM	***Welcome***	***TBD***
9:20 AM	***Welcome & Overview***	*John Nelson, NIAC Program Executive*
9:30 AM	***Keynote***	***TBD***
10:30 AM	**BREAK & Planetary Radio Interviews**	
10:50 AM	*2024 Phase I (1)*	*Kenneth Carpenter, NASA GSFC* *A Lunar Long-Baseline Optical Imaging Interferometer: Artemis-enabled Stellar Imager (AeSI)*
11:10 AM	*2024 Phase I (2)*	*Matthew McQuinn, University of Washington, Seattle* *Solar System-Scale VLBI to Dramatically Improve Cosmological Distance Measurements*
11:30 AM	*2024 Phase I (3)*	*Ge-Cheng Zha, Coflow Jet, LLC* *Mars Aerial and Ground Global Intelligent Explorer (MAGGIE)*
11:50 AM	**Special Address**	***TBD***
12:10 PM	**LUNCH & Planetary Radio Interviews**	
1:30 PM	*2024 Phase II (1)*	*Mary Knapp, MIT Haystack Observatory* *The Great Observatory for Long Wavelengths (GO-LoW)*
1:50 PM	*2024 Phase II (2)*	*Edward Balaban, NASA ARC* *Fluidic Telescope (FLUTE): Enabling the Next Generation of Large Space Observatories*
2:10 PM	*2024 Phase II (3)*	*Mahmooda Sultana, NASA GSFC* *ScienceCraft for Outer Planet Exploration (SCOPE)*
2:30 PM	**BREAK & Planetary Radio Interviews**	
2:50 PM	*2023 Phase II (1)*	*Ronald Polidan, Lunar Resources, Inc.* *FarView Observatory – A Large, In-Situ Manufactured, Lunar Far Side Radio Array*
3:10 PM	*2023 Phase II (2)*	*Darmindra Arumugam, NASA JPL* *Quantum Rydberg Radar for Surface, Topography, and Vegetation*
3:30 PM	*2023 Phase II (3)*	*Michael Eades, Ultra Safe Nuclear Corporation – Space* *The Nyx Mission to Observe the Universe from Deep Space – Enabled by EmberCore, a High Specific Power RadioisotopeElectric Propulsion System*
3:50 PM	***Poster Session Group A***	
4:50 PM	**ADJOURN**	
6:30 to 8:00 PM	**Informal NIAC Fellows' Meet & Greet Event (Poster Room)**	

2024 NIAC SYMPOSIUM AGENDA

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DAY 2: Wednesday, September 11

Time (PST)	Event	Speaker
9:00 AM	**Welcome & NIAC Plans**	*NIAC Staff*
9:30 AM	***Keynote***	***TBD***
10:30 AM	**BREAK & Planetary Radio Interviews**	
10:50 AM	*2024 Phase I (4)*	*Lynn Rothschild, NASA ARC* *Detoxifying Mars: The Biocatalytic Elimination of Omnipresent Perchlorates*
11:10 AM	*2024 Phase I (5)*	*Steven Benner, Foundation for Applied Molecular Evolution* *Add-on to Large-scale Water Mining Operations on Mars to Screen for Introduced and Alien Life*
11:30 AM	*2024 Phase I (6)*	*Ryan Sprenger, Fauna Bio Inc.* *A Revolutionary Approach to Interplanetary Space Travel: Studying Torpor in Animals for Space-health in Humans (STASH)*
11:50 AM	*2024 Phase I (7)*	*Alvaro Romero-Calvo, Georgia Tech Research Corporation* *Magnetohydrodynamic Drive for Hydrogen and Oxygen Production in Mars Transfer*
12:10 AM	**LUNCH & Planetary Radio Interviews**	
1:30 PM	*2024 Phase II (4)*	*Ethan Schaler, NASA JPL* *FLOAT – Flexible Levitation on a Track*
1:50 PM	*2024 Phase II (5)*	*Brianna Clements, Howe Industries* *Pulsed Plasma Rocket (PPR): Shielded, Fast Transits for Humans to Mars*
2:10 PM	*2024 Phase II (6)*	*Stephen Polly, Rochester Institute of Technology* *Radioisotope Thermoradiative Cell Power Generator*
2:30 PM	**BREAK & Planetary Radio Interviews**	
2:50 PM	*2023 Phase II (4)*	*David Perrault, MIT* *Silent, Solid-State Propulsion for Advanced Air Mobility Vehicles*
3:10 PM	*2023 Phase II (5)*	*Philip Lubin, University of California, Santa Barbara* *PI – Planetary Defense*
3:30 PM	*2023 Phase II (6)*	*Lynn Rothschild, NASA ARC* *A Flexible, Personalized, On-Demand Astropharmacy*
3:50 PM	***Poster Session Group B***	
4:50 PM	**ADJOURN**	
	Free Evening for Fellows' Networking and Collaboration; Women of Science	

2024 NIAC SYMPOSIUM AGENDA

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DAY 3: Thursday, September 12

Time (PST)	Event	Speaker
9:00 AM	**NIAC Q&A**	*NIAC Staff Q&A*
9:30 AM	***Keynote***	***TBD***
10:30 AM	**BREAK & Planetary Radio Interviews**	
10:50 AM	*2024 Phase I (8)*	*Peter Cabauy,* City Labs, Inc. *Autonomous Tritium Micropowered Sensors*
11:10 AM	*2024 Phase I (9)*	*Marshall Eubanks, Space Initiatives, Inc.* *Swarming Proxima Centauri: Coherent Picospacecraft Swarms Over Interstellar Distances*
11:30 AM	*2024 Phase I (10)*	*Geoffrey Landis, NASA GRC* *Sample Return from the Surface of Venus*
11:50 AM	*2024 Phase I (11)*	*James Bickford, Charles Stark Draper Laboratory* *Thin Film Isotope Nuclear Engine Rocket (TFINER)*
12:10 PM	**LUNCH & Planetary Radio Interviews**	
1:30 PM	***Keynote***	***TBD***
2:30 PM	**BREAK & Planetary Radio Interviews**	
2:50 PM	*2024 Phase I (12)*	*Aaswath Pattabhi Raman, UCLA* *Electro-luminescently Cooled Zero-boil-off Propellant Depots Enabling Crewed Exploration of Mars*
3:10 PM	*2024 Phase I (13)*	*Beijia Zhang, MIT Lincoln Laboratory* *LIFA: Lightweight Fiber-based Antenna for Small Sat-Compatible Radiometry*
3:30 PM	*2024 Phase III (1)*	***TBD***
3:50 PM	**ADJOURN**	

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POSTER SESSION SCHEDULE - GROUP A - Tuesday, September 10, 2024

2024 Phase I Fellows
Kenneth Carpenter, NASA GSFC *A Lunar Long-Baseline Optical Imaging Interferometer: Artemis-enabled Stellar Imager (AeSI)*
Matthew McQuinn, University of Washington, Seattle *Solar System-Scale VLBI to Dramatically Improve Cosmological Distance Measurements*
Ge-Cheng Zha, Coflow Jet, LLC *Mars Aerial and Ground Global Intelligent Explorer (MAGGIE)*
Peter Cabauy, City Labs, Inc. *Autonomous Tritium Micropowered Sensors*
Marshall Eubanks, Space Initiatives, Inc. *Swarming Proxima Centauri: Coherent Picospacecraft Swarms Over Interstellar Distances*
Geoffrey Landis, NASA GRC *Sample Return from the Surface of Venus*
2023 Phase II Fellows
Ronald Polidan, Lunar Resources, Inc. *FarView Observatory – A Large, In-Situ Manufactured, Lunar Far Side Radio Array*
Darmindra Arumugam, NASA JPL *Quantum Rydberg Radar for Surface, Topography, and Vegetation*
Michael Eades, Ultra Safe Nuclear Corporation – Space *The Nyx Mission to Observe the Universe from Deep Space – Enabled by EmberCore, a High Specific Power RadioisotopeElectric Propulsion System*
David Perreault, MIT *Silent, Solid-State Propulsion for Advanced Air Mobility Vehicles*
2024 Phase II Fellows
Mary Knapp, MIT Haystack Observatory *The Great Observatory for Long Wavelengths (GO-LoW)*
Edward Balaban, NASA ARC *Fluidic Telescope (FLUTE): Enabling the Next Generation of Large Space Observatories*
Mahmooda Sultana, NASA GSFC *ScienceCraft for Outer Planet Exploration (SCOPE)*
2024 Phase III Fellow
TBD

2024 NIAC SYMPOSIUM AGENDA

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POSTER SESSION SCHEDULE – GROUP B - Wednesday, September 11, 2024

2024 Phase I Fellows
Lynn Rothschild, NASA ARC *Detoxifying Mars: The Biocatalytic Elimination of Omnipresent Perchlorates*
Steven Benner, Foundation for Applied Molecular Evolution *Add-on to Large-scale Water Mining Operations on Mars to Screen for Introduced and Alien Life*
Ryan Sprenger, Fauna Bio Inc. *A Revolutionary Approach to Interplanetary Space Travel: Studying Torpor in Animals for Space-health in Humans (STASH)*
Alvaro Romero-Calvo, Georgia Tech Research Corporation *Magnetohydrodynamic Drive for Hydrogen and Oxygen Production in Mars Transfer*
James Bickford, Charles Stark Draper Laboratory *Thin Film Isotope Nuclear Engine Rocket (TFINER)*
Aaswath Pattabhi Raman, UCLA *Electro-luminescently Cooled Zero-boil-off Propellant Depots Enabling Crewed Exploration of Mars*
Beijia Zhang, MIT Lincoln Laboratory *LIFA: Lightweight Fiber-based Antenna for Small Sat-Compatible Radiometry*
2023 Phase II Fellows
Philip Lubin, University of California, Santa Barbara *PI – Planetary Defense*
Lynn Rothschild, NASA ARC *A Flexible, Personalized, On-Demand Astropharmacy*
2024 Phase II Fellows
Ethan Schaler, NASA JPL *FLOAT – Flexible Levitation on a Track*
Brianna Clements, Howe Industries *Pulsed Plasma Rocket (PPR): Shielded, Fast Transits for Humans to Mars*
Stephen Polly, Rochester Institute of Technology *Radioisotope Thermoradiative Cell Power Generator*