



ISDC 2023 Schedule

As of 5/24/23

Registration

8:00 am - 7:00 pm

Morning Plenary

8:30 am - 9:45 am

Student Plenary

10:00 am - 10:45 am

Student spUN Debates

8:30 am - 10:00 am

Student spUN Debates

10:30 am - 12:30 pm

NSS Meeting

9:00 am - 11:00 am

10:00 am - 12:00 noon

Mars

10:00 am

10:20 am

10:40 am

11:00 am

11:20 am

11:40 am

Interplanetary Infrastructure

10:00 am

10:30 am

11:00 am

11:30 am

Saturday, May 27

Pre Convene

Pre Convene (Student Registration 9:00 am - 6:00 pm)

Frisco 1&2

Panel: "Exploring Non-STEM Education in Space Development"

Panelists: Andy Aldrin, Embry Riddle Aeronautical University; Col. Karlton D. Johnson, USAF (Ret.), Chairman, NSS Board of Governors; Ken Davidian, International Space University; John West, Space Foundation; and Michelle Hanlon, University of Mississippi School of Law.

Moderator: Dr. Greg Autry, Director and Professor of Space Leadership, Policy and Business at Thunderbird School of Global Management

Frisco 1&2

"Creating Your Space Legacy: Inspiring Students and Teachers to Shape the Future of Space Exploration"

Speaker: John Quinn, Co-founder and CEO, EXOS Aerospace Systems & Technologies

EXOS is an aerospace manufacturer and developer of reusable launch systems intended to support uncrewed orbital spaceflight launches, and is based in Caddo Mills, Texas.

Bass-Bush

International High School spUN Debate Teams Final Debate Round

The live debates will be streamed to ISDC from the debater's home country and are the culmination of months of virtual preparation and international collaboration. ISDC attendees are invited to attend.

Bass-Bush

International University spUN Debate Teams Final Debate Round

The live debates will be streamed to ISDC from the debater's home country and are the culmination of months of virtual preparation and international collaboration. ISDC attendees are invited to attend.

Whirlaway (2nd floor)

NSS Chapters Assembly

Morning Sessions

Frisco 3

Why Mars? Rod Pyle (*Ad Astra* Magazine)

A Recent Glacier Near Mars' Equator: Implications for Science and Human Exploration. Dr. Pascal Lee (Mars Institute, SETI Institute & NASA Ames Research Center)

Miniature Laser Retroreflectors for the Mars System. Dr. Luciana Filomena (National Institute of Nuclear Physics, Italy)

NSS Student Space Settlement Contest Presentation: GAEA. Teodora-Elena Tataru, Laura Strugaru and Robert Ciungara (Andrei Saguna National College, Brasov, Romania)

In Space The Other Side Should Have The Right To Be Heard. Alex Simmonds (University of Dundee, Scotland)

Open Forum: Moon To Mars. Moderator: Dr. Pascal Lee (Mars Institute, SETI Institute & NASA Ames Research Center)

Frisco 4

The Relentless March Towards Space Launch Infrastructure and Where it Might Ultimately Lead Us. Philip Swan (The Atlantis Project)

Are Ambitious Apollo Era Space Infrastructure Proposals Obsolete or Unrealized? John Wilkes (Worcester Polytechnic Institute, retired)

Equatorial Low-Earth Orbit: Earth's Natural Harbor. Rand Simberg

Reusing Surplus Spacecraft Energy to Rapidly Develop Planetary Infrastructure. Lev Reznikov (CRYOFOR)



ISDC 2023 Schedule

As of 5/24/23

Saturday, May 27

Life Support in Space

10:00 am

10:20 am

10:40 am

11:00 am

11:20 am

Frisco 5

ITEK Space Agriculture: Indigenous Traditional Ecological Knowledge/Artemis Human Space Program. Dan Hawk (Galxyz LLC)

Medical Considerations for Prolonged Human Spaceflight: Current Capabilities and Future Challenges. Steven Anthony Smith (United States Air Force)

Cognitive and Manual Dexterity Measures as Predictors of International Space Station Task Performance in Virtual Reality. Dr. Erik Seedhouse (Embry-Riddle Aeronautical University)

Photobioreactor Systems in Space for Life Support: Light Sources, Oxygen, Water, Food and SAF Fuel Production. Robin Hawk (Galxyz LLC)

Interstellar Space Travel in the 21st Century. David McGuire (United States Air Force, retired)

Lunch

12:00 noon - 1:50 pm

Frisco 1&2

"MARS ASTRONAUT FIELD TRAINING: A Few More Things You Should Know"

Keynote Speaker: Dr. Pascal Lee, Planetary Scientist, SETI Institute; Co-Founder and Chairman, Mars Institute; and Director, Haughton-Mars Project at NASA Ames Research Center

Presenting of NSS Space Pioneer Award to Dr. Pascal Lee

MC: Rod Pyle, Editor-In-Chief, *Ad Astra* Magazine

Student Poster Session

1:30 pm - 3:30 pm

Frisco 6

NSS Space Settlement Contest posters on display with the student presenters.

2:00 pm - 5:00 pm

Mars

2:00 pm

2:20 pm

2:40 pm

3:00 pm

3:20 pm

3:40 pm

4:00 pm

4:20 pm

5:20 pm

Afternoon Sessions

Frisco 3

Preparing for Mars: Physiological Challenges and Potential Mitigation Strategies. Dr. Erik Seedhouse (Embry-Riddle Aeronautical University)

Audio-Visual Entrainment Technology (AVE) for Space Environments. Thorsten Eschweiler (Mars University)

Using the Metaverse to Settle Mars. Camisha Simmons (Simmons Legal PLLC)

Where Should Humans Land On Mars? Dr. Pascal Lee (Mars Institute, SETI Institute & NASA Ames Research Center)

NSS Student Space Settlement Contest Presentation: Suvereno Udü. Zhaohan (Zack) Chen, Chun-Yu (Alex) Chen, Yu-Ning (Madina) Chen, Cheng-Yeh (Justin) Lin, Yi-Fan (Peter) Lai, Shang-Chieh (Billy) Lien, Sin-Yao (Katherine) Huang, Yu-Ning (William) Kang, I-Chen (Ethan) Hsieh, Ching-Hsuan (Doris) Yang (Kang Chiao International School Linkou Campus, New Taipei City, Taiwan, Republic of China)

Martian Pottery: Age-Old Technology for Living on a New World. Dr. Justin Walsh (Chapman University)

Mars Terraforming via Volatile Transfer. John Strickland (National Space Society)

Panel: Mars Will Be An Even Harsher Mistress. Dr. Pascal Lee (Mars Institute), Rod Pyle (*Ad Astra* Magazine), Dr. Eric Seedhouse (Embry-Riddle Aeronautical University) and Dr. Jim Bell (Arizona State University)

Open Forum: Humans To Mars. Moderator: Dr. Pascal Lee (Mars Institute, SETI Institute & NASA Ames Research Center)

Rothblatt Competition

2:00 pm

Frisco 4

Rothblatt Space Settlement in Our Lifetime Business Plan Competition

(listed in alphabetical order)

BONES: AI Based Digital Doctor Avatar. Trent Tresch, East Wenatchee, WA. (Team Members: Trent Tresch, Kai Staats, Dr. Mira Milas, Dr. Eric Petersen and David Vili)

Hermes Lunar Base: Hudson's Bay Company of the 21st Century. Carl Greenbaum, Dunedin, FL

LifeShip: Spread Life In The Universe. Ben Haldeman, Carlsbad, CA (Team Members: Alexandra Hall, VJ Bala, and Shaziana Kaderali)



ISDC 2023 Schedule

As of 5/24/23

Saturday, May 27

Space Ambassadors

2:00 pm

3:00 pm

3:30 pm

4:00 pm

4:30 pm

5:00 pm

5:30 pm

Frisco 5

Space Ambassadors' Panel: Perspectives on Space Priorities. Loretta Hall, Ken Ruffin, Christean Kapp, and Stevan Akerley. Moderator: Jim Plaxco

Keto in Space: Menu options and food processing for Vegan, Kosher, and Carnivore. Bryce Meyer (NSS Space Ambassadors)

Can Spaceflight Blow Your Mind? Psychological Challenges for Long-Duration Missions. Loretta Hall (NSS Space Ambassadors)

The Future of NASA and Commercial Spaceflight. Ken Ruffin (NSS Space Ambassadors)

A History of Lunar Cartography and Nomenclature. Jim Plaxco (NSS Space Ambassadors)

How to Move FAST IN THE Solar System. Christean Kapp (NSS Space Ambassadors)

Closing dialogue and comments. Stevan Akerley (NSS Space Ambassadors)

Silent Auction

2:00 pm - 6:50 pm

Pre Convene

Thanks to the generous contributions of longtime NSS member Joe Rauscher, we will be holding a silent auction of remarkable mementos from science fiction and spaceflight. The items up for sale include unique and one-of-a-kind items from your favorite motion picture and television franchises. Many of these are unique and irreplaceable so be sure to get your bids in early! Proceeds will benefit NSS programs in STEM education, career development and support, space solar power, and inclusion/diversity. The Silent Auction will end on Saturday, May 27 at 6:50 PM.

Student NextGen Program

3:30 pm - 5:00 pm

Frisco 1&2

Panel: "Experience in Space Programs"

SEDS alum discuss their experience in current space programs.

Ian Burrell (NASA), Anthony Razo (Hot Nozzle Society), Christian Sipe (Honeybee Robotics), and Harper Cheyenne (NASA)

MC: Sara Alvarado, Executive Director, SEDS

Presented by Students for the Exploration and Development of Space (SEDS)

Cocktail Reception

6:00 pm - 7:00 pm

Pre Convene

Open reception includes a cash bar and appetizers.

Reception sponsored by the International Space Elevator Consortium

Dinner

7:00 pm - 9:30 pm

Frisco 1&2

"James Webb Space Telescope: A New Era of Astronomy for All"

Keynote Speaker: Dr. Eric Smith, Program Scientist, James Webb Space Telescope Program, NASA

Presenting of the NSS Wernher von Braun Memorial Award to Dr. Eric Smith on behalf of the James Webb Space Telescope Team

Presenting of NSS Space Pioneer Award to Dr. David Livingston, Founder and Host, The Space Show®

Presenting of Rothblatt Space Settlement in Our Lifetime Prize

Presenting of Student Space Settlement Contest Grand Prize Award

MC: Col. Karlton D. Johnson, USAF (Ret.), Chairman, NSS Board of Governors

Party

9:30 pm - Till

Frisco 7

Party