Friday, May 26

Training for the Stars
7:00 am - 7:45 am
Hotel Fitness Center
Total Body Strength Training with Fitness Coach Laura Clancy

Student Services
8:00 am - 6:00 pm
Depot Registration Office

Exhibit Hall
10:00 am - 6:00 pm
Midway

Morning Plenary
8:45 am - 9:45 am
Grand Ballroom EF
Welcome & MC: Christine Nobbe, Conference Chair for ISDC 2017, St. Louis Space Frontier, National Space Society Board of Directors
Opening Remarks: Mark Hopkins, Chairman of the Executive Committee, National Space Society Board of Directors
Keynote Speaker: Charles Miller, NexGen Space

Student Plenary
10:00 am - 10:45 am
Grand Ballroom EF
"International Efforts in Future Space Exploration"
Keynote Speaker: Prof. Johann-Dietrich Wörner, Director General, European Space Agency
MC: Dr. Linda Godwin, Professor, Physics and Astronomy, University of Missouri-Columbia and retired NASA Shuttle Astronaut, Johnson Space Center

10:00 am - 12:00 noon
Morning Tracks

Back to the Moon
Grand Ballroom C
Global Politics of Lunar Development
10:00 am Introduction to Global Politics of Lunar Development. Bruce Pittman (NASA Ames Space Portal)
10:30 am NASA’s HEOMD’s Lunar Activities. Dr. Ben Bussey (NASA)
10:45 am Current Lunar Missions. Dr. Bradley Jolliff (Washington University in Saint Louis)
11:00 am Commercial-National-International Nexus for Policy. Dr. Andrew Aldrin (Buzz Aldrin Space Institute and Florida Institute Technology)
11:30 am Panel: Global Politics of Lunar Development. Dr. Clive Neal (University of Notre Dame), Dr. Bradley Jolliff (Washington University in Saint Louis), Charles Miller (NexGen Space), Dr. Ben Bussey (NASA), and Bruce Pittman (NASA Ames Space Portal). Moderator: Dr. Andrew Aldrin (Buzz Aldrin Space Institute and Florida Institute Technology)

Space Business
Grand Ballroom A
10:00 am NASA/NSS Student Space Settlement Contest Presentation
10:10 am NewSpace Business Plan Competition. Joel Vinas (Center for Space Commerce and Finance)
11:00 am NewSpace Business Plan Competition. Joel Vinas (Center for Space Commerce and Finance)

Space Solar Power
Grand Ballroom B
Technical & Economic Challenges of Infrastructure TD3
10:00 am Next Steps In Modular Design. Dr. Paul Jaffe (U.S. Naval Research Laboratory)
10:45 am U.N. Sustainability Goals & the Cislunar Marketplace. David Dunlop (Space Development Foundation)
11:15 am Critical Path Technology & Cislunar Project Orchestration. Jim Keravala (Off-World Consortium)
As of 5-24-17

**Friday, May 26**

**Space Transportation**

**Grand Ballroom D**

10:00 am  
Introduction. Jim Merriman (St. Louis Space Frontier)

10:05 am  
Fast Space. Lt. Col. Thomas P. Schilling (Air University, USAF), Charles Miller (NextGen Space), and Hoyt Davidson (Near Earth and National Space Society Board of Directors)

11:00 am  
Vector-R and Vector-H (Small Launch Vehicles). Matt Baker (Vector Space Systems)

11:25 am  
BOREAS (Balloon Assisted Launch System). Brian Stofiel (Stofiel Aerospace)

**NextGen**

**Midway Suite III**

11:00 am  
NASA/NSS Student Space Settlement Contest Presentation

11:15 am  
Introducing BocksCAD - Coding for 3D Printing. Dr. David Thornburg (Polar3D)

**NSS Meeting**

**Midway Suite II**

10:00 am - 11:00 am  
International Committee with David Dunlop

**Lunch**

**Grand Ballroom F**

12:00 noon - 1:50 pm  
“Living and Working in Space”

Keynote Speaker: Dr. Linda Godwin, Professor, Physics and Astronomy, University of Missouri-Columbia and retired NASA Shuttle Astronaut, Johnson Space Center

Presenting of Missouri Space Pioneer Award to Dr. Linda M. Godwin

Presenting of Jim Baen Memorial Short Story Award

MC: Harry Hamlin, Founder, Tri Alpha Energy and National Space Society Board of Governors

**Student Poster Session**

**Midway**

1:00 pm - 3:00 pm

**Authors' StratoLounge**

**Midway**

2:00 pm - 3:00 pm  
Peter A. Swan (Space Elevators)

3:00 pm - 4:00 pm  
Bryce Meyer (You Will Design Space Engines, You Will Design Space Habitats, You Will Design Spaceships, You Will Farm in Space)

4:00 pm - 5:00 pm  
Rod Pyle (Amazing Stories of the Space Age, Blueprint for a Battlestar, Mars: Making Contact)

**NSS Meeting**

**Switchman Room**

1:00 pm - 2:00 pm  
Space Business Plan Meeting

**Student Activity**

**Midway**

2:00 pm - 3:00 pm  
Meet & Greet with Dr. Linda Godwin, Professor, Physics and Astronomy, University of Missouri-Columbia and retired NASA Shuttle Astronaut, Johnson Space Center

2:00 pm - 6:00 pm  
**Afternoon Tracks**

**Back to the Moon**

**Grand Ballroom C**

**Sustainable Lunar Architectures. Dennis Wingo (Skycorp)**

2:00 pm  
Lunar Settlement Visions Introduction. Madhu Thangavelu (University of Southern California)

2:00 pm  
Moon Village. Prof. Johann-Dietrich Wörner (European Space Agency)

2:30 pm  
The Value of Our Moon. Dr. Clive Neal (University of Notre Dame)

2:45 pm  
Lunar Surface Terrain. Dr. Bradley Jolliff (Washington University in Saint Louis)

3:00 pm  
Lunar Habitat Concept. Dr. Douglas Plata (Lunar COTS)

3:15 pm  
PAVING the way to Planetary Basalt ISRU Construction. Rob Kelso (Kelso Aerospace and National Space Society Board of Directors)

3:30 pm  
Pioneering the Moon-Dust to Thrust, Rocks to Blocks. Robert Mueller (NASA Kennedy Space Center)

3:45 pm  
Contour Crafting A Lunar Base. Dr. Behrokh Khoshnevis (University of Southern California)

4:00 pm  
USC SeleneOption 2016. Madhu Thangavelu (University of Southern California)

4:15 pm  
How to Build a Lunar Base. Henk Rogers (Pacific International Space Center for Exploration Systems)

4:30 pm  
Planet Moon. Dr. David G. Schrunk (Science of Laws Institute)

4:45 pm  
International Lunar Decade. David Dunlop (National Space Society International Committee)

5:00 pm  
NASA/NSS Student Space Settlement Contest Presentation

5:15 pm  
Closing Panel: Recommendations
## ISDC 2017 Schedule

**Friday, May 26**

### Space Business

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>2:00 pm</td>
<td>NASA/NSS Student Space Settlement Contest Presentation</td>
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<tr>
<td>2:10 pm</td>
<td>The Big Business of Launching Small Satellites. John Quinn (EXOS Aerospace Systems &amp; Technologies) and Matt Baker (Vector Space Systems)</td>
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<tr>
<td>3:00 pm</td>
<td>NewSpace Business Plan Competition Awards Announcement. Joel Vinas (Center for Space Commerce and Finance)</td>
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<tr>
<td>3:20 pm</td>
<td>Skycorp presentation. Dennis Wingo (Skycorp)</td>
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<tr>
<td>4:00 pm</td>
<td>New Ideas in the Business of Space. Andrew Sloan (Cosma Schema), Keegan Kirkpatrick (RedWorks), and Thomas Olson (Avealto)</td>
</tr>
<tr>
<td>5:00 pm</td>
<td>New Ideas in the Business of Space. Dr. Andrew Aldrin (Florida Institute of Technology) and Megan Crawford (Brand Delta-V)</td>
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### Space Solar Power

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>2:00 pm</td>
<td>Lunar Power &amp; Light Company. Daniel Faber, Brad Blair and Gary Barnhard (XISP)</td>
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<tr>
<td>2:45 pm</td>
<td>Space Solar Power International Student Competition Introduction. John C. Mankins (Mankins Space Systems)</td>
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<tr>
<td>3:00 pm</td>
<td>Space Solar Power International Student Competition Presentations. The semi-finalist team presentations include students from the following institutions: Dalian University of Technology (China), Delft University of Technology (The Netherlands), Hampton University (USA), Harbin Institute of Technology (China), Hosei University (Japan), Indiana University (USA), Kitawato University (Japan), Princeton University (USA), Indiana University–Purdue University Indianapolis (USA), Shizuoka University (Japan), The Graduate University of Advanced Studies (Japan), Tokai University (Japan), Tokyo University of Science (Japan), University of Colorado, Boulder (USA), and the University of Maryland (Baltimore County and College Park Campuses, USA).</td>
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<tr>
<td>5:30 pm</td>
<td>Charting the Path Forward, Fostering Cooperation, Collaboration, and Competition. John C. Mankins (Mankins Space Systems)</td>
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### Space Transportation

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<tbody>
<tr>
<td>2:00 pm</td>
<td>Between Earth and Moon (Cis-Lunar) Explorers. Kyle Doyle (Cornell University Space Systems Design Studio)</td>
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<tr>
<td>2:25 pm</td>
<td>Between Earth and Moon (Cis-Lunar) Transportation. Dr. Douglas Plata (Lunar COTS)</td>
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<tr>
<td>3:00 pm</td>
<td>Aquarius (Interplanetary Space Travel). Dr. James Logan (Space Enterprise Institute)</td>
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<tr>
<td>3:25 pm</td>
<td>Nuclear Fusion: The Next Giant Leap in Space Propulsion. Gerald Black (The Mars Society)</td>
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<tr>
<td>4:00 pm</td>
<td>NASA/NSS Student Space Settlement Contest Presentation</td>
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<td>4:15 pm</td>
<td>Earth-Mars Transport. Erv Bauman (St. Louis Space Frontier)</td>
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<td>NASA/NSS Student Space Settlement Contest Presentation</td>
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<tr>
<td>5:15 pm</td>
<td>Beamed Energy Propulsion. Jonathan Coopersmith (Texas A&amp;M)</td>
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### NextGen

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<tbody>
<tr>
<td>2:00 pm</td>
<td>How You Can Launch A High Altitude Balloon and Why It Belongs in Your Classroom. Dustin Mayfield-Jones (Arch Reactor)</td>
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<tr>
<td>3:00 pm</td>
<td>NASA/NSS Student Space Settlement Contest Presentation</td>
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<tr>
<td>3:15 pm</td>
<td>Telescopes in the Library: Starting a Telescope &quot;Check out&quot; Program in Your Library Don Ficken (St. Louis Astronomical Society)</td>
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<tr>
<td>4:00 pm</td>
<td>NASA/NSS Student Space Settlement Contest Presentation</td>
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<tr>
<td>4:15 pm</td>
<td>Unlocking Keys to the Universe: Education's Future. Trish McCarty (StarShine Academy)</td>
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### Student Activity

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<tr>
<td>3:00 pm - 4:00 pm</td>
<td>Vocation Rotation - Interactive Student Session</td>
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<tr>
<td>5:00 pm - 6:00 pm</td>
<td>Student Meet &amp; Greet with Prof. Johann-Dietrich Wörner, Director General, European Space Agency</td>
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### Cocktail Reception

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<tbody>
<tr>
<td>6:00 pm - 7:00 pm</td>
<td>Grand Foyer</td>
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**Friday, May 26**

**Governors' Dinner**
Grand Ballroom EF
7:00 pm - 9:00 pm
“ROI of Exploration”
Keynote Speaker: Prof. Johann-Dietrich Wörner, Director General, European Space Agency
Presenting of NSS Wernher von Braun Memorial Award to Prof. Johann-Dietrich Wörner
Presenting of NSS Chris Pancratz Activist of the Year Award
Presenting of NSS Excellence Awards
MC: Buckner Hightower, Heinlein Prize Trust
Governors' Dinner Sponsored by the Heinlein Prize Trust

**Star Party**
(location tbd)
8:00 pm - 10:00 pm

**Video Screenings**
Grand Ballroom D
9:30 pm - 11:00 pm
ZGAC/STEAM Film Festival
Zero Gravity Arts Consortium STEAM screening features video shorts created by students studying with Frank Pietronigro at the Academy of Art University in San Francisco who created an exciting array of films using the ISDC 2017 conference theme, “in the spirit of exploration and discovery,” as a springboard.

**NSS Meeting**
Midway Suite II
9:30 pm - Till
ISDC 2018 Planning Committee Meeting

**NSS Meeting**
tbd
9:30 pm - Till