Frontiers of Imagination
The Intersection of Space Science Fiction, Art, and Fact

Moderator: Bryce L. Meyer

27 May 2017 8:00PM-9:30 PM  Grand Ballroom B
International Space Development Conference (ISDC) 2017
Saint Louis MO
Where Are We Going This Evening?

- Who are the Panelists?
- Introduction of Topic
- Presentations by Each Panelist
- Debate
- Questions and Answers
- Door Prize!
Who are our Panelists?

(No order implied)

Loretta Hall
Rod L. Pyle
Madhu Thangavelu
Peter A. Swan
John E. Kaufmann
David Schrunk
Lynn Herzberger
Panelist Bio: Loretta Hall:

Loretta Hall is a freelance writer and author of eight books. For the past decade, she has concentrated on the history and future of space exploration. She lives in Albuquerque and is president of New Mexico Press Women. At last year’s ISDC, she placed fourth in Phase I of the Space Ambassador program and is now a member of the Phase II Space Ambassador Subcommittee. She also serves on the NSS Book Review Committee.
Panelist Bio: Rod Pyle:

As an author and writer based in Pasadena, CA, has written extensively for NASA/JPL, the California Institute of Technology and many science and general interest publications and venues, such as Space.com, Popular Science and Huffington Post. He has also written nonfiction books focus innovation, technology, science and the US space program. He has received powerful reviews and generated dozens of media appearances, including PBS, the Washington Post and NPR. He speaks frequently on skill sets related to leadership in innovation. Recent projects include facilitation of innovation leadership training and hands-on innovation development exercises. Rod co-designed and wrote the Apollo Leadership Development Experience with NASA’s Johnson Space Center. He also lectured for and co-facilitated these programs for C-suite executives from Fortune 100 companies as well as corporate training professionals. He has also spent a decade as a lecturer/visiting professor at the University of La Verne and has produced documentary television for The History Channel, Z Living Health and Wellness, and Discovery Communications.
Panelist Bio: Madhu Thangavelu:

Madhu Thangavelu conducts the graduate Space Exploration Architectures Concept Synthesis Studio at the Viterbi School of Engineering @ USC. He holds degrees in both engineering and architecture and has contributed extensively to concepts in space architecture, especially dealing with extraterrestrial development. He is the author or co-author of over 70 technical papers in space architecture, lunar base design and human factors, and co-author of the book The Moon: Resources, Future Development and Settlement(1999). He is the invited author of the chapter “Living on the Moon” in the Encyclopedia of Aerospace Engineering. He is on the faculty of the International Space University, an international organization that provides training for promising new generation of leaders and space professionals around the world.
Panelist Bio: Peter Swan

Dr. Peter A. Swan is President of the International Space Elevator Consortium. As such, he leads a team who further the concept with incremental studies and yearly conferences. Over the last ten years he has published seven books on the topic as co-author and/or co-editor. He graduated from the US Military Academy in 1968 with a Bachelor of Science degree and served 20 years in the Air Force with a variety of research and development positions in the space arena. He taught at the Air Force Academy and retired as a Lieutenant Colonel. Upon retirement in 1988, he joined Motorola on the Iridium satellite program. He led the team responsible for the development of the Iridium spacecraft bus. In 1998, he helped develop Teaching Science and Technology, Inc. that teaches space systems engineering. His classes emphasize engineering know-how and management techniques to successfully develop space systems of national importance. Pete received his Ph.D. from the University of California at Los Angeles in Mechanical Engineering with a specialty in space systems.

- Space Elevators: An Assessment of the Technological Feasibility and the Way Forward [2014],
- Design Considerations for Space Elevator Tether Climbers [2013],
- Space Elevator Concept of Operations [2012],
- Space Elevator Survivability – Space Debris Mitigation [2010],
- Space Elevator Architecture and Roadmaps [2014],
- Design Considerations of a Space Elevator Earth Port [2015], and
- Space Elevators Systems Architecture [2005].
Panelist Bio: John Kaufmann:

John has been creating artwork for science books and research teams for about 20 years. His work has appeared in many places including the Science Journal Nature, Cell, and many Oxford University Press publications. He is also a proud contributor to the NASA Lunar Surface Journals. To preserve sanity (more or less), he also creates original artwork which he shows at art shows across the country. He is interested in most of the sciences but has a very special love for astronomy. The only thing he enjoys more than creating art is researching the amazing subject matter used in his work.
Panelist Bio: David G. Schrunk:

David G. Schrunk is an aerospace engineer and medical doctor with specialty ratings in nuclear medicine and diagnostic radiology. Dr. Schrunk worked as an intern for two months at the NASA Manned Spacecraft Center in Houston, Texas, in 1967. He served for two years in the army as an investigator at the Army Aeromedical Research Laboratory in Alabama and worked for one year in aeromedical research at the McDonnell-Douglas Astronautics facility in Huntington Beach California. He also enjoyed a twenty-year career in the practice of medicine in the San Diego area. Upon retirement, he pursued his avocation of space research by giving presentations and publishing scientific articles pertaining to lunar development. In 1999, he and three coauthors published the book, "The Moon: Resources, Future Development, and Settlement." The “Moonbook” describes the steps that can be taken to transform the Moon into an inhabited sister planet of the Earth by the end of the 21st century. He is also a member of the board of directors of the International Lunar Observatory Association (ILOA). ILOA plans to place a telescope on the Moon by piggybacking a ride with Moon Express in their pursuit of the Lunar X Prize. Dr. Schrunk resides in Poway, California.
Panelist Bio: Lynn Herzberger:

Lynn Herzberger, worked as a mercenary illustrator, illustrating carburetors in Hot Rod magazine, and interior and exterior designs. Done many aerial cartoon illustrations; then moved onto space art, including the marketing panel for St. Louis Science Center. Lynn then moved on to moon and celestial object illustration using 'plein air' style, for which he is now locally well known. He also did the official ISDC 2017 Commemorative Poster.
What are the Big 3 Questions?

How do you think space writing and art has affected the real space program to date?

How has the real space program affected space writing/art to date?

In the future, how do you expect space writing/art to shape how we will settle and explore space?
You can define the future!
Thank You for Attending!
See us in the Stratolounge!
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This track features an author and artist panel, preceded by a short summary of the history of space science fiction (Books, Movies, TV) and space exploration. Each panelist will provide a summary of their visions and opinions, then will answer three questions: How do you think space writing and art has affected the real space program to date? How has the real space program affected space writing/art to date? In the future, how do you expect space writing/art to shape how we will settle and explore space? Then a moderated question and answer session and debate will ensue. A door prize of classic sci-fi will follow!