

WORKSHOP AGENDA

*Sharing the Adventure with the Public:
The Value and Excitement of "Grand Questions" of Space Science and Exploration*

Space Studies Board



MONDAY, NOVEMBER 8, 2010

01:00 **Welcome** **Michael Moloney, SSB Director**

01:05 **Keynote Introduction** **Charles Kennel, SSB Chair**

01:15 **Keynote: "No Guts ... No Glory. Why NASA Needs to Relish the Risk to Stay Relevant"**
(30 Minutes)

Speaker: ***Miles O'Brien, Media Consultant & Chair of the NASA Advisory Council's Education and Public Outreach Committee***

Audience: Interaction with Speaker (30 Minutes)

02:15 **Session 1: "Answering Grand Questions"**

This session will address the contribution of the space program over the last 50 years to answering a number of "Grand Questions" of science and exploration, as identified by the SSB, and set the scene for the subsequent 5 sessions which will address potential future contributions.

Moderator: ***Charles Kennel, SSB Chair***

Speaker: ***Roger Bonnet, Executive Director, International Space Science Institute***

Panel: Interaction with Speaker (25 Minutes)

Audience: Interaction with Speaker and Panelists (25 Minutes)

03:45 **Break**

04:15 **Session 2: “Understanding the Universe: How did it begin and how is it evolving?”**

Through the use of space systems we are able to study the universe from early in its formation up to the present day, unencumbered by constraints inherent in observing it from the ground. As such the universe becomes a “laboratory”.

Moderator: *Alan Dressler*, SSB

Speaker 1: ***Roger Blandford*, Professor of Physics at Stanford University and Chair: Astro2010 (The Astronomy and Astrophysics Decadal Survey) (20 Minutes)**

Speaker 2: ***Jean-Pierre Swings*, Professor, Université de Liège, Institut d’Astrophysique et de Géophysique & Chair of the European Space Sciences Committee of the European Science Foundation (20 Minutes)**

Panel: Interaction with Speaker (25 Minutes)

Audience: Interaction with Speaker and Panelists (25 Minutes)

05:45 **Close of day’s Workshop activities**

Charles Kennel, SSB Chair

TUESDAY, NOVEMBER 9, 2010

08:45 **Opening Remarks**

Charles Kennel, SSB Chair

09:00 **Session 3: “Are We Alone?”**

This is an issue that covers the gamut from trying to detect microbial life beyond the Earth to the Search for Extraterrestrial Intelligence. Space systems and technology have and will continue to play key roles in these endeavors.

Moderator: *Robert Pappalardo*, SSB

Speaker 1: ***Sara Seager*, Professor of Planetary Science and Physics, MIT, and author of “Is There Life Out There? The Search for Habitable Planets” (20 Minutes)**

Speaker 2: ***Steve Benner*, Distinguished Fellow, Florida Foundation of Applied Molecular Evolution (20 Minutes)**

Panel: Interaction with Speaker (25 Minutes)
Audience: Interaction with Speaker and Panelists (25 Minutes)

10:30 **Break**

11:00 **Session 4: "Understanding the Solar System: How did it begin, how is it evolving?"**

Space systems have played, and will continue to play an important role in the remote and *in-situ* study of all aspects of the solar system.

Moderator: ***Charles Woodward, SSB***

Speaker 1: ***Heidi Hammel, Senior Research Scientist and Co-Director of Research at the Space Science Institute in Boulder, Colorado***
(20 Minutes)

Speaker 2: ***Edward C. Stone, David Morrisroe Professor of Physics and Vice Provost of Special Projects, California Institute of Technology, and Former Director of the Jet Propulsion Laboratory*** (20 Minutes)

Panel: Interaction with Speaker (25 Minutes)

Audience: Interaction with Speaker and Panelists (25 Minutes)

12:30 **Lunch**

01:45 **Session 5: "The Earth: Will it remain an hospitable home for humanity in the Future?"**

The space program has made extensive and at many times essential contributions to the monitoring of the Earth and its environment. In a time of global climate change, major environmental degradation, etc, the future of the planet and the role space will play in that future merits serious attention.

Moderator: ***Molly Macauley, SSB***

Speaker 1: ***Berrien Moore, Dean, College of Atmospheric and Geographic Sciences, University of Oklahoma and SSB member*** (20 Minutes)

Speaker 2: ***Roger Bonnet, Executive Director, International Space Science Institute, and Co-Author of "Surviving 1,000 Centuries: Can We Do It?"*** (20 Minutes)

Panel: Interaction with Speaker (25 Minutes)
Audience: Interaction with Speaker and Panelists (25 Minutes)

03:15 **Break**

04:15 **Session 6: "What could the future hold for humans in space?"**

Mankind has been a space faring species for over five decades, but, apart from the Apollo program, has yet to venture further than low Earth orbit. The session will address potential scenarios for the future of human spaceflight.

Moderator: *Elizabeth Cantwell, SSB*

Speaker 1: *Jeff Bingham, Senior Advisor on Space & Aeronautics, (Republican Staff) U.S. Senate Committee on Commerce, Science, and Transportation, Subcommittee on Science and Space* (20 Minutes)

Speaker 2: *Kim Stanley Robinson, Author* (20 Minutes)

Panel: Interaction with Speaker (25 Minutes)
Audience: Interaction with Speaker and Panelists (25 Minutes)

05:45 **Close of Day's Workshop Activities** Charles Kennel, SSB Chair

WEDNESDAY, NOVEMBER 10, 2010

08:45 **Opening Remarks** Charles Kennel, SSB Chair

09:00 **Session 7: "Inspiring Public Interest in space research and exploration: Communication Challenges and Opportunities"**

Taking into account the discussions of the previous two days, this session will focus on how professional communicators can best make space research and exploration stories related to the "Grand Questions" compelling to public audiences. What narrative strategies and techniques will most effectively communicate the meaning, value, and excitement of future NASA missions? What pitfalls should be avoided?

Moderator: *Joan Vernikos, SSB*

Speaker: **"Writing about the Science, the Scientists and the Adventure of Astrobiology"** (20 Minutes)
Marc Kaufmann, Science Reporter and Editor, The Washington Post

Speaker: **“News, Narratives, and Emerging Technologies: The 'Science' of Communicating Science”** (20 Minutes)
Dietram A. Scheufele, Professor, Science Communication, University of Wisconsin – Madison

Speaker: **“Building Long-term Constituencies for Space Exploration: The Challenge of Raising Public Awareness”** (20 Minutes)
Linda Billings, Research Professor, George Washington University; Principal Investigator, NASA Astrobiology Program

Panel: Interaction with Speakers (25 Minutes)
Audience: Interaction with Speakers (20 Minutes)

10:45 **Break**

11:15 Session 8: “Communication Pathways to the Public: Reading, Watching, Interacting”

The final panel will address the unique capabilities, as well as the limitations, of the types of media available today to reach the public with stories of space research and exploration. Experts from the world of print, TV, and the Internet will discuss the relative merits of story-telling using the platforms of readable content, video programming, and social media. How do these approaches vary in their power to inspire and motivate? How can they potentially complement each other in an overarching communications strategy?

Moderator: ***Joan Johnson-Freese, SSB***

Speaker: **“Reading the Story”** (20 Minutes)
Andrew Lawler, Science Journalist

Speaker: **“Watching the Story”** (20 Minutes)
Dexter Cole, Vice President of Programming, The Science Channel

Speaker: **“Interacting with the Story”** (20 Minutes)
Christie Nicholson, Contributing Editor, Scientific American Online

Panel: Interaction with Speakers (25 Minutes)
Audience: Interaction with Speakers (20 Minutes)

01:00 **Summary and Wrap-up**

Charles Kennel, SSB Chair

01:15 **Adjourn**