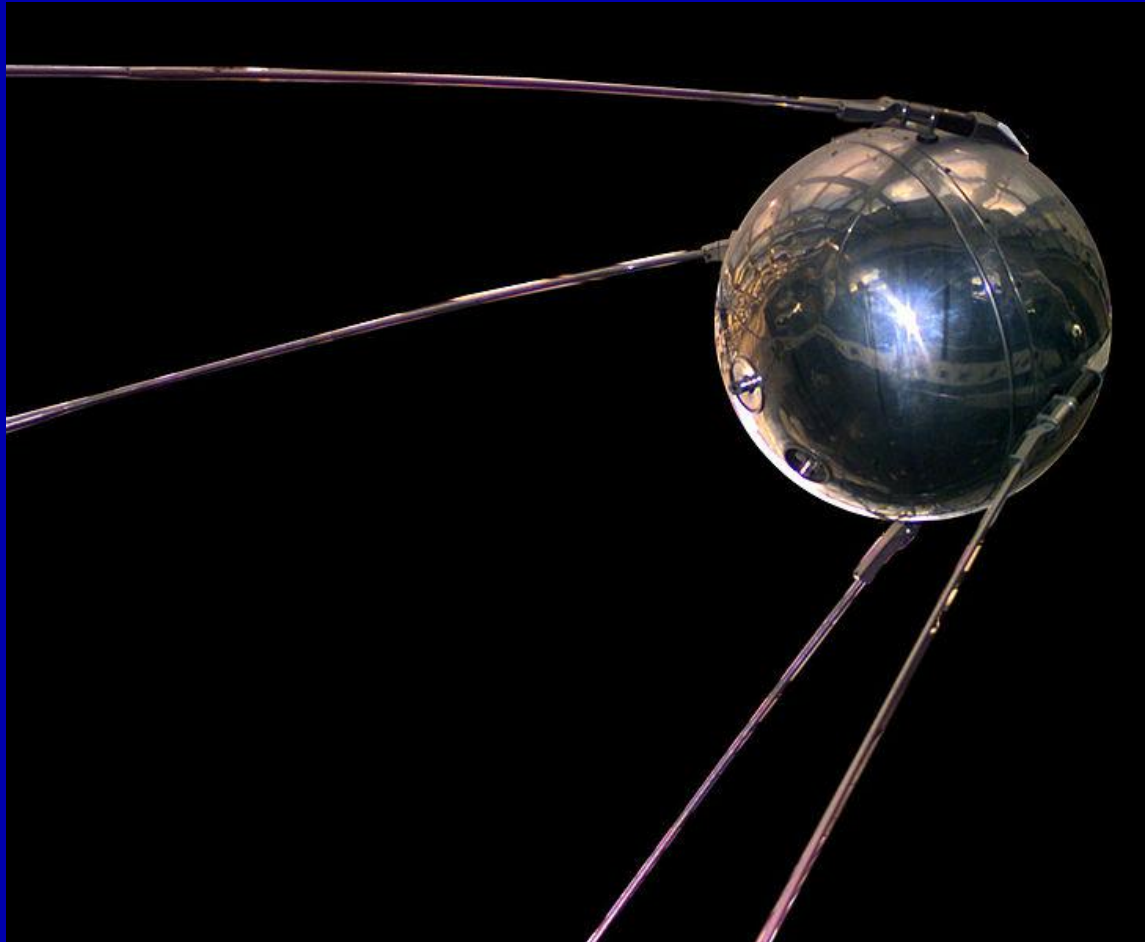


Space for STEM: Re-thinking our Options and Opportunities

Shirley M. Malcom, Ph.D.





Post- Sputnik: Galvanizing U.S. Resolve

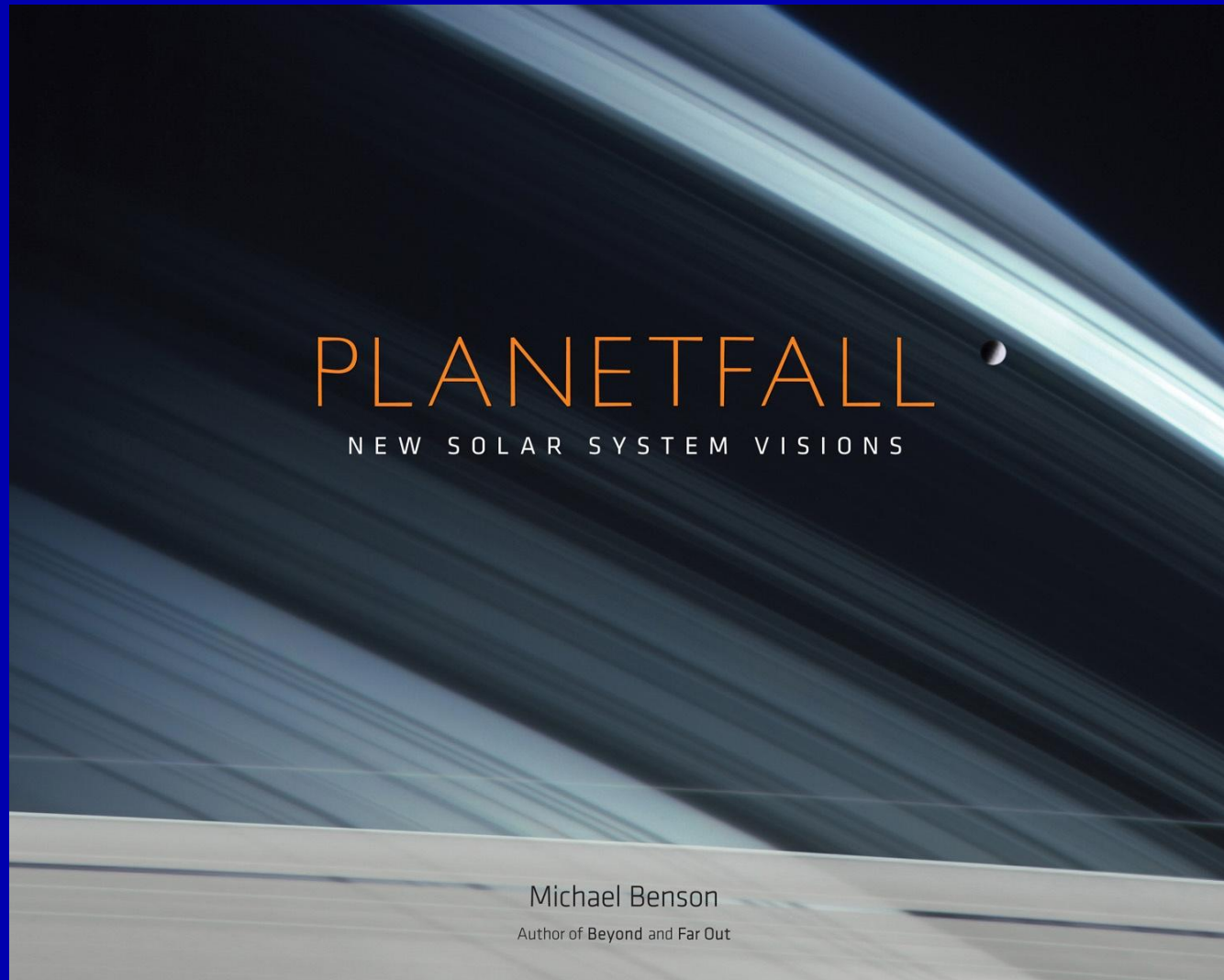
- Common political purpose with bi-partisan support of key legislation and development of S&T infrastructure
- Investment in STEM education at all levels—graduate support, teacher training, curriculum development
- Focus on capacity building and talent development, less constrained by prevailing societal norms

Galvanizing U.S. Resolve (cont'd)

- Inspiration to young people (and to the existing S&T workforce)
- The possibility of careers in STEM
- Attention to space and other areas of science in the media
- Reinforcing some stereotypes, reducing others

“Winning” in the Long Term

- Technology transfer from the “space race”
- Sputnik “inspired” technology– GPS
- “Excess” human capacity for STEM
- Enhanced institutional capacity
- Commercialization –NASA spin-off technologies
- Supporting industry, security, quality of life





Welcome to the AAAS exhibit of *Planetfall*, featuring spectacular images from our solar system by Michael Benson using image data from NASA and European Space Agency planetary missions. We are also pleased to welcome you to this exciting program where Mr. Benson will join with Dr. Nancy Chabot to speak to the science that emerges from imaging as well as the process by which the magnificent art of the images is created.


The Art of Science and Technology Program of the American Association for the Advancement of Science was created in 1985 to further the organization's goal of increasing public engagement with science and technology. This exhibit will be on display here at AAAS headquarters until June 28. During this time we will present a number of programs for a range of audiences including educators, students, policymakers, artists and science lovers.

We want to especially thank our members and sponsors for making this exhibit and programming possible.

Sincerely,



Phillip Blair
Chief Financial and
Administrative Officer
Chair, AAAS Art Committee



Shirley Malcom
Director, Education and Human
Resources

This evening's presenters:



Michael Benson
Artist

Michael Benson's work focuses on the intersection of art and science. A photographer, writer, filmmaker, book-designer, and exhibitions producer, in the last decade he has staged a series of increasingly large-scale exhibitions of planetary landscape photography internationally. His fourth book, *Planetfall: New Solar System Visions*, was published by Abrams in October 2012. Benson takes raw data from NASA and European Space Agency archives and processes it, creating large-format landscapes. He edits, composites, then frequently mosaics, and then finally optimizes these images, producing seamless digital C prints of landscapes beyond direct human experience.



Nancy Chabot
Planetary Scientist

Dr. Nancy L. Chabot is a planetary scientist at the Johns Hopkins University Applied Physics Laboratory (APL). At APL, she oversees an experimental petrology laboratory that is used to investigate the evolution of planetary bodies. Prior to joining APL, Dr. Chabot worked at NASA Johnson Space Center and Case Western Reserve University. Currently, Dr. Chabot is the Instrument Scientist for the Mercury Dual Imaging System (MDIS) on the MESSENGER mission. Having become the first spacecraft ever to orbit the planet Mercury in March 2011, MESSENGER and MDIS images are returning unprecedented data about Mercury and providing fundamental new insights into the Solar System's innermost planet.

Images of Our Solar System: Science Meets Art 27 March 2013

- 5:30PM** Event Commences
- 5:40PM** Welcome
- 5:45PM** Introductions
Bob Hirshon, Moderator
- 5:50PM** Presentation by Nancy Chabot
- 6:10PM** Presentation by Michael Benson
- 6:30PM** Q&A with Nancy and Michael
- 7:00PM** Closing remarks
Michael Benson book signing
Reception in 1st floor gallery
- 8:30PM** Reception ends

Please visit
<http://www.aaas.org/news/events/art/events.shtml>
for more information about the series of events
planned in conjunction with the *Planetfall* Exhibit.

For more on Michael Benson's work see
<http://michael-benson.net/>

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How We Teach-- How We Learn

- Asking important questions
- Making connections across fields
- Applying our knowledge to address societal and global challenges
- Working in teams
- Communicating
- Valuing each other and what each of us brings

A Wide Range of Fields-A Wide Range of Roles

- Career opportunities abound– using “space” as a base to ask questions in many fields ; applying lessons from other fields to space science
- Raising awareness of career opportunities as well as life options
- What about the non-majors? Using space to engage artists, humanists
- What is the “narrative” for this generation? Global engagement, making a difference?

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