

Spring 2023 Meeting of the Discipline Committees of the Space Studies Board

March 28-30, 2023

Hybrid Meeting National Academy of Sciences Building - Kavli Auditorium 2101 Constitution Avenue, Washington, DC

> PLENARY Session Agenda, March 28th **KEYNOTE Public Lecture, March 29th**

Tuesday, March 28, 2023

Space Science Week Plenary Session

Introductions and JWST Science Update

Public Livestream link: https://vimeo.com/event/2973366

11:00 AM Introductions Dr. Margy Kivelson

SSB Chair

11:05 AM Panel: JWST Science Update

> (15-minute presentation each and 15-minute discussion) Moderator: Dr. Colleen Hartman, SSB Director

Panelists: Dr. Tommaso Treu, University of California, Los Angeles via Zoom

Dr. Steven Finkelstein, The University of Texas at Austin via Zoom

Dr. Thomas Greene, NASA Ames Research Center

12:05 PM Lunch in the Great Hall

(60-minute break; additional seating in the East and West Courts)

NASA, NSF, and	NOAA Science	Update
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1:00 PM **Welcome to the Agency Updates** Dr. Margy Kivelson

SSB Chair

1:05 PM Address by NASA Associate Administrator

Mr. Bob Cabana NASA Associate Administrator (20-minute address)

1:25 PM NASA Science Mission Directorate (SMD) Overview

Dr. Nicky Fox SMD Associate Administrator, NASA

(30-minute presentation and 30-minute discussion)

2:25 PM National Science Foundation (NSF) Science

Program Update

(20-minute presentation and 10-minute discussion)

Dr. Sean Jones, Director, Directorate for Mathematical and Physical Sciences, NSF

2:55 PM National Oceanic and Atmospheric Administration (NOAA)

Update

(20-minute presentation and 10-minute discussion)

Dr. Michael Morgan Asst. Secretary of Commerce for Environmental Observation and Prediction, Dept. of Commerce

3:25 PM Break

3:55 PM

(30-minute break)

International Partners' Presentations

3:50 PM Introduction of International Partners

European Space Agency (ESA) Program Science Highlights Dr. Carole Mundell, Director of Science, ESA

(15-minute presentation and 10-minute discussion)

Dr. Gaitee Hussain, Head of Science Division, ESA

4:20 PM Japanese Aerospace Exploration Agency (JAXA) Science Highlights

(15-minute presentation and 10-minute discussion)

Dr. Masaki Fujimoto Deputy Director General, JAXA

Dr. Margy Kivelson, SSB Chair

4:45 PM South Korean Science Highlights

(15-minute presentation and 10-minute discussion)

Dr. Young Deuk Park, President Korean Astronomy and Space Science Institute

5:10 PM Indian Space Research Organization Science Highlights

(15-minute presentation and 10-minute discussion)

Mr. Krunal Joshi, Counsellor, Space Embassy of India

5:35 PM Break

(25-minute break)

Special Session on NASA's Artemis Program

6:00 PM Panel: How Science is Managed within the Artemis Program

(5-minute presentation each and 40-minute discussion)

Moderator: Dr. Colleen Hartman, SSB Director
Panelists: Mr. Jim Free, NASA-ESDMD

Dr. Joel Kearns, NASA-SMD Dr. Brett Denevi, JHU-APL Dr. Jack Burns, U. Colorado

7:05 PM Plenary Session Adjourns for the Day

WEDNESDAY, MARCH 29, 2023

KEYNOTE SPACE SCIENCE WEEK EVENING PUBLIC LECTURE
HYBRID MEETING — IN PERSON OR ON LIVESTREAM (LINK BELOW)
NATIONAL ACADEMY OF SCIENCES BUILDING KAVLI AUDITORIUM
2101 CONSTITUTION AVENUE, WASHINGTON, DC

Public Livestream Link: https://vimeo.com/event/2973372

7:00 PM An Infinity of Worlds: Cosmic Inflation and the Beginning of the Universe

Dr. William Kinney Professor, Dept. of Physics University of Buffalo

Abstract:

In the beginning was the Big Bang: an unimaginably hot fire almost fourteen billion years ago in which the first elements were forged. The physical theory of the hot nascent universe -- the Big Bang -- was one of the most consequential developments in twentieth-century science. And yet it leaves many questions unanswered: Why is the universe so big? Why is it so old? What is the origin of structure in the cosmos? Physicist Will Kinney explains a more recent theory that may hold the answers to these questions and sheds light on the ultimate origins of the universe: cosmic inflation.

Speaker Biography:

Will Kinney is a professor in the Department of Physics at the University at Buffalo, SUNY, where he has been on faculty since 2003. Dr. Kinney received his Bachelor of Arts from Princeton University and Ph.D. from the University of Colorado, Boulder. He has worked as a research associate at Fermi National Accelerator Laboratory, the University of Florida, and Columbia University, and held visiting positions at Yale University, Perimeter Institute for Theoretical Physics, Harish Chandra Research Institute, Allahabad, the University of Chicago, the University of Valencia, Indian Institute of Technology Madras, and Stockholm University. Dr. Kinney's research focuses on the physics of the very early universe, including inflationary cosmology, the Cosmic Microwave Background, Dark Matter, and Dark Energy. He has authored more than seventy published research articles and received the SUNY Chancellor's award for excellence in teaching in 2014.