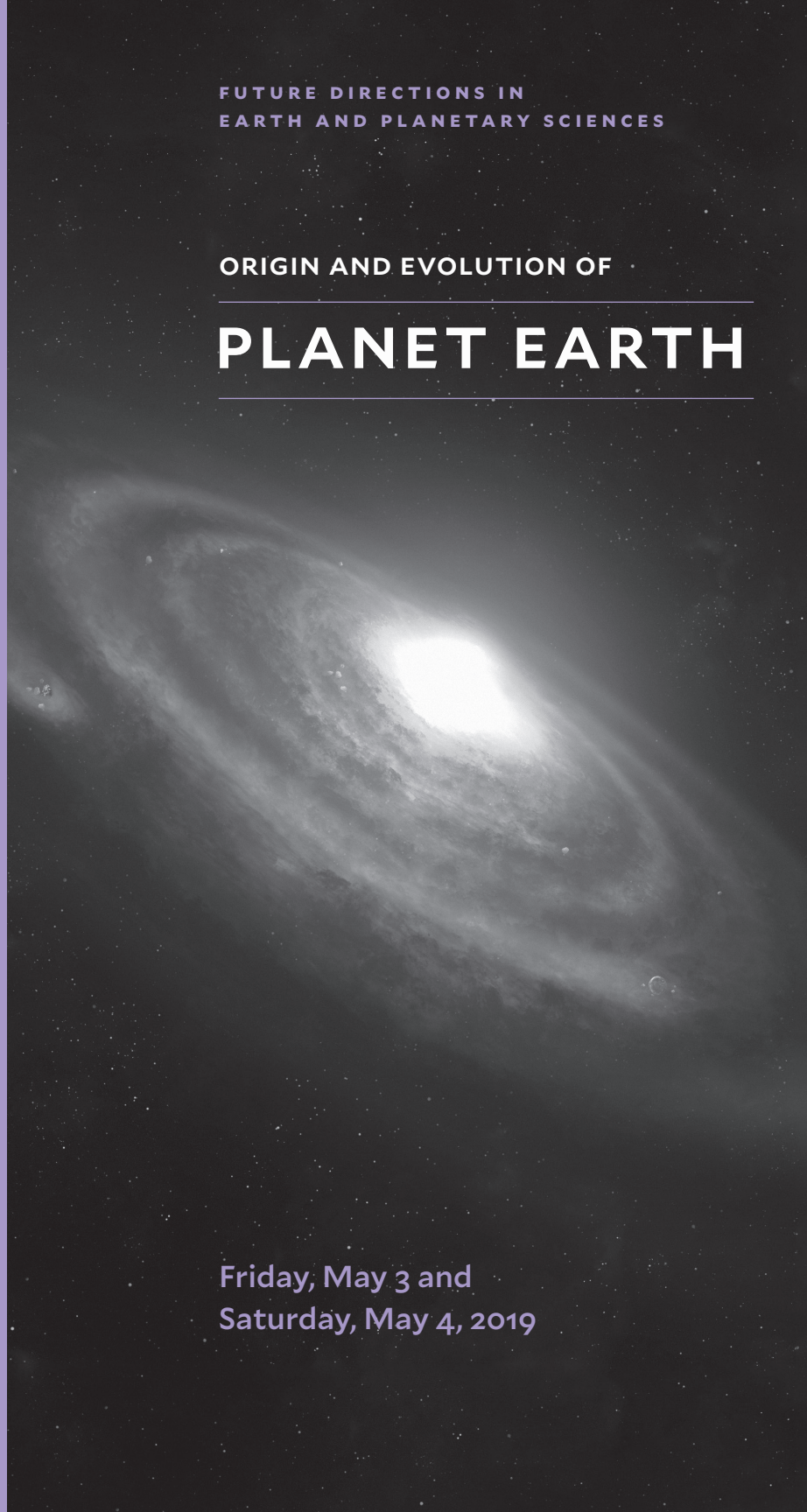


FUTURE DIRECTIONS IN
EARTH AND PLANETARY SCIENCES

ORIGIN AND EVOLUTION OF

PLANET EARTH



Yale *Department of Geology & Geophysics*

COVER ART: CASEY REED

earth.yale.edu/origin-and-evolution-planet-earth

Friday, May 3 and
Saturday, May 4, 2019

ORIGIN AND EVOLUTION OF PLANET EARTH

Kline Geology Laboratory, Room 123 • 210 Whitney Avenue, New Haven, Connecticut

FRIDAY MAY 3

- 8:00–8:50 AM Light Breakfast**
- 8:50–9:00 AM Welcome: David Bercovici**
Chair, Geology & Geophysics
Yale University
- 9:00–10:00 AM Alexander Halliday**
Columbia University
The Origin of the Earth and Moon
- 10:00–11:00 AM Seth Jacobson**
Northwestern University
A Giant Impact Origin for the Earth-Venus Dichotomy
- 11:00–11:30 AM Coffee Break**
- 11:30 AM–12:30 PM Steven Desch**
Arizona State University
Consequences of Terrestrial Embryo Formation During the Lifetime of The Protoplanetary Disk
- 12:30–1:30 PM Lunch**
- 1:30–2:30 PM Konstantin Batygin**
California Institute of Technology
The Role of Giant Planet Migration in Terrestrial Planet Formation
- 2:30–3:30 PM Juan Lora**
Yale University
Atmospheric Evolution, Stability, and Climate: Lessons from an Outer Solar System Terrestrial Body
- 3:30–4:00 PM Coffee Break**
- 4:00–5:00 PM Gregory Laughlin**
Yale University
The Antipodal Effect—Geophysical Insights from the Topographic Power Spectra of Terrestrial Worlds
- 5:00–5:30 PM Open Discussion: Debra Fischer**
Yale University
- 5:30 PM Reception**

SATURDAY MAY 4

- 8:30–9:00 AM Light Breakfast**
- 9:00–10:00 AM Conel Alexander**
Carnegie Institution of Washington
Small Bodies from the Inner and Outer Solar System as Likely Sources of Volatiles for the Terrestrial Planets
- 10:00–11:00 AM Adam Sarafian**
Corning Inc
Observational and Experimental Evidence of Hydrous Accretion to the Inner Planets
- 11:00–11:30 AM Coffee Break**
- 11:30 AM–12:30 PM Sujoy Mukhopadhyay**
University of California, Davis
Volatile Accretion and Loss on a Growing Earth
- 12:30–1:30 PM Lunch**
- 1:30–2:30 PM Marc Hirschman**
University of Minnesota
Origin and Processing of Earth's Major Volatiles (H,C,N,S), from Primitive Materials to Planetary Differentiation
- 2:30–3:30 PM Keiko Hamano**
Tokyo Institute of Technology
Formation of Atmosphere and Oceans on the Early Earth
- 3:30–4:00 PM Coffee Break**
- 4:00–5:00 PM Nikku Madhusudhan**
University of Cambridge
Chemical Characterization of Extrasolar Planets
- 5:00–5:30 PM Open Discussion: Shun-ichiro Karato**
Yale University
- 5:30 PM Closing Remarks: Shun-ichiro Karato**
Yale University
- 5:40 PM Reception**