



Origins of Solar Systems (GRS)

Gordon Research Seminar

The Foundations of Planets

June 17 - 18, 2017

Chairs

Kamber Schwarz and Richard Lyons

Mount Holyoke College

50 College Street

South Hadley, MA, US

Conference Description

The Gordon Research Seminar on Origins of Solar Systems is a unique forum for graduate students, post-docs, and other scientists with comparable levels of experience and education to present and exchange new data and cutting edge ideas across the fields of astronomy, astrophysics, cosmochemistry, planetary science, and geochemistry.

This meeting will focus on promoting cross-disciplinary conversations, starting with a review talk to provide attendees with the background knowledge needed to get the most out of the GRS and subsequent GRC. The topics that will be explored include, but are not limited to, the characteristics of exoplanets, recent advancements in our understanding of the gas and dust in protoplanetary and debris disks, and the history of the solar system as revealed by small bodies. The meeting will also include a career panel driven by participants questions discussing career paths with both upcoming and senior faculty. Talks will be selected from submitted poster abstracts and we hope to make support available to as many participants as possible.

Related Meeting



This GRS will be held in conjunction with the "Origins of Solar Systems" Gordon Research Conference (GRC). Those interested in attending both meetings must submit an application for the GRC in addition to an application for the GRS. Refer to the [associated GRC program page](#) for more information.

Conference Program

Saturday

2:00 pm - 5:00 pm	Arrival and Check-in
3:30 pm - 3:45 pm	Introductory Comments by GRC Site Staff / Welcome from the GRS Chair
3:45 pm - 4:30 pm	Keynote Session: Connecting Solar and Extrasolar Systems Discussion Leader: Rhonda Stroud (U.S. Naval Research Laboratory, USA)
3:45 pm - 4:20 pm	Fred Ciesla (University of Chicago, USA) "Studying Planet Formation on Micro and Macro Scales"
4:20 pm - 4:30 pm	Discussion
4:30 pm - 6:00 pm	Poster Session
6:00 pm - 7:00 pm	Dinner
7:30 pm - 9:30 pm	Dust and Rocks Discussion Leader: Hilke Schlichting (University of California, Los Angeles / Massachusetts Institute of Technology, USA)
7:30 pm - 7:45 pm	Meredith MacGregor (Harvard-Smithsonian Center for Astrophysics, USA) "A Complete ALMA Map of the Fomalhaut Debris Disk"
7:45 pm - 7:50 pm	Discussion
7:50 pm - 8:05 pm	Wanda Feng (School of Earth and Space Exploration, Arizona State University, USA) "Disk Accretion of Tidally Disrupted Rocky Bodies onto White Dwarfs"
8:05 pm - 8:10 pm	Discussion
8:10 pm - 8:25 pm	Tim Lichtenberg (ETH Zurich, Switzerland) "A Thermo-Mechanical Goldilocks Regime for Impact Splash Chondrule Formation"
8:25 pm - 8:30 pm	Discussion

8:30 pm - 8:45 pm	Myriam Telus (Carnegie Institution of Washington, USA) "Fluid Evolution in Early Planetesimals: Insights from CM Chondrites"
8:45 pm - 8:50 pm	Discussion
8:50 pm - 9:05 pm	Jaehan Bae (University of Michigan, USA) "On the Role of Giant Planets in Shaping a Habitable World"
9:05 pm - 9:10 pm	Discussion
9:10 pm - 9:30 pm	General Discussion
Sunday	
7:30 am - 8:30 am	Breakfast
9:00 am - 11:00 am	Gas and Atmospheres Discussion Leader: Leslie Rogers (University of Chicago, USA)
9:00 am - 9:15 am	Mihkel Kama (University of Cambridge, United Kingdom) "Exoplanetesimals: New Constraints on Gas, Ice, and Mineral Compositions in Protoplanetary Disks"
9:15 am - 9:20 am	Discussion
9:20 am - 9:35 am	Keri Hoadley (University of Colorado Boulder, USA) "Signatures of Molecular Hydrogen Absorption in Protoplanetary Disk Environments"
9:35 am - 9:40 am	Discussion
9:40 am - 9:55 am	Anusha Kalyaan (Arizona State University, USA) "Location of Snowlines and Distribution of Water in Protoplanetary Disks"
9:55 am - 10:00 am	Discussion
10:00 am - 10:15 am	Allona Vazan-Shukrun (Anton Pannekoek Institute for Astronomy (API), University of Amsterdam, The Netherlands) "Super-Earth Mass-Radius Relation: The Role of Core Formation"
10:15 am - 10:20 am	Discussion

10:20 am - 10:35 am	Adam McKay (Goddard Space Flight Center, NASA / Universities Space Research Association, USA) "Cometary Composition Studied via Optical and IR Spectroscopy"
10:35 am - 10:40 am	Discussion
10:40 am - 11:00 am	General Discussion
11:00 am - 12:30 pm	Poster Session <i>Coffee will be served in the poster area from 11:00 am - 11:30 am</i>
12:30 pm - 1:30 pm	Lunch
1:30 pm - 2:30 pm	Mentorship Component: Career Panel Discussion Leader: Fred Ciesla (University of Chicago, USA)
1:30 pm - 2:30 pm	Panel Discussion <i>Career Paths in Science</i> <ul style="list-style-type: none"> • Edwin Bergin (University of Michigan, USA) • Leslie Rogers (University of Chicago, USA) • Hilke Schlichting (University of California, Los Angeles / Massachusetts Institute of Technology, USA) • Rhonda Stroud (U.S. Naval Research Laboratory, USA)
2:30 pm - 3:00 pm	Evaluation Period <i>Fill in GRS Evaluation Forms</i>
3:00 pm	Seminar Concludes

Contributors

		
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