



Tidal Heating: Lessons from Io and the Jovian System

**October 15-19, 2018
Overview Schedule**

**Monday, October 15, 2018
Salvatori Seminar Room, South Mudd Building (3rd floor) - Caltech**

**Short Course: Tidal Heating on Solar System Worlds
Introductory Lectures - Open to all interested students, researchers and faculty**

Time	Event	Speaker
8:15 - 8:45	Coffee and Refreshments	
8:45 - 9:00	Logistics / Introduction	Michele Judd and Katherine de Kleer
9:00 - 9:45	Geophysics and Interior Processes of Rocky and Icy Bodies	Francis Nimmo
9:45 - 10:30	Geological Activity on Tidally-Heated Solar System Worlds, with an Emphasis on Io	Julie Rathbun
10:30 - 11:00	Break	
11:00 - 11:45	Planetary Materials and their Response to Tidal Deformation	Christine McCarthy
11:45 - 12:30	Linking Tidal, Rotational, and Orbital Evolution	Jim Fuller
12:30 - 1:30	Short Course Ends: Informal Lunch is provided outside Salvatori Seminar Room	

**Invitation-Only Workshop Begins
Keck Center - Think Tank, Room 155**

1:30 - 1:45	Walk to Keck Center, pick up badge and welcome packet, find seat in the Think Tank	
1:45 - 2:30	Workshop Logistics and Introduction to KISS	Michele Judd
2:30 - 3:00	Participant Introductions	All
3:00-3:30	Study vision and goals for this workshop	Alfred McEwen, Ryan Park, and Katherine de Kleer
3:30-4:00	Break	
4:00-5:00	Finalize study vision and workshop goals via plenary discussion and Solicitation of Lightning Talks	Ryan Park, Katherine de Kleer, and Alfred McEwen
5:00-5:30	Current and Future Spacecraft Missions to Tidally-Heated Worlds	Karen Kirby
5:30 - 6:00	Pack up and walk to the Athenaeum	All
6:00	Dinner at the Athenaeum	

Tuesday, October 16, 2018 - Keck Center - Think Tank, Room 155

Time	Event	Speaker
8:00 - 8:30	Institute Opens - FREE THINK TIME	
8:30 - 9:00	Coffee and Refreshments at Keck Center	
9:00 - 9:15	Logistics and Team Lead Goals for the Day	Michele Judd and Team Leads
9:15 - 9:45	Astrometry and Tidal Migration	Jim Fuller and Valerey Lainey
9:45 - 10:15	Thermal Emission on Io and How this Links to Volcanic Advection	Ashley Davies
10:15 - 10:45	Lightning Talks (2)	TBD by participants
10:45 - 11:15	Break	
11:15 - 11:25	Selection of initial Breakout Groups	All
11:25 - 12:30	Breakout Groups Meet	Groups
12:30 - 2:00	Group Picture and Lunch at the Athenaeum	
2:00 - 2:45	Report outs from breakout groups (15 mins each)	Group leads
2:45 - 3:15	Lightning Talks (2)	TBD by participants
3:15 - 3:30	Selection of Breakout Groups and Topics	All
3:30 - 4:00	Break	
4:00 - 5:30	Breakout Groups Meet	Groups
5:30 - 7:30	POSTER SESSION and Informal food truck dinner at the Keck Center (dinner starts at 6:30 pm)	

Wednesday, October 17, 2018 - Keck Center - Think Tank, Room 155

8:00 - 8:30	Institute Opens - FREE THINK TIME	
8:30 - 9:00	Coffee and Refreshments at Keck Center	
9:00 - 9:15	Logistics and Team Lead Goals for the Day	Michele Judd and Team Leads
9:15 - 9:45	Report Outs from Breakout Groups (10 mins each)	Group Leads
9:45 - 10:15	Tidal Heating of Ocean Worlds	Isamu Matsuyama
10:15 - 10:45	Tidal Heating in Rocky Worlds	David Stevenson
10:45 - 11:15	Break	
11:15 - 12:00	Lightning talks (3)	TBD by participants
12:00 - 12:30	Plenary Discussion, Selection of Breakout Groups and Topics	All
12:30 - 2:00	Lunch at the Athenaeum	
2:00 - 3:30	Breakout Groups Meet	All
3:30 - 4:00	Break	
4:00 - 4:45	Report outs from breakout groups (15 mins each)	Group Leads
4:45 - 5:30	Plenary Discussion on Participant Wants and Needs Selection of Next Day's Breakout Groups	All
5:30	Workshop Day #3 Ends	All
6:00	OPTIONAL: No-Host Dinner in Pasadena	

Thursday, October 18, 2018 - Keck Center - Think Tank, Room 155

8:00 - 8:30	Institute Opens - FREE THINK TIME	
8:30 - 9:00	Coffee and Refreshments at Keck Center	
9:00 - 9:15	Logistics and Team Lead Goals for the Day	Michele Judd and Team Leads
9:15 - 9:45	Magnetic Induction Study of Interiors	Krishan Khurana
9:45 - 10:15	Seismology of Tidally Active Worlds	Mark Panning
10:15 - 10:45	Lightning talks (2)	TBD by participants
10:45 - 11:15	Break	
11:15 - 12:30	Breakout Groups Meet	All
12:30 - 2:00	Lunch on your own	
2:00 - 2:30	FREE THINK TIME (individual, or self organizing small groups)	All
2:30 - 3:15	Report outs from breakout groups (15 mins each)	Group Leads
3:15 - 3:30	Plenary Discussion, Selection of Breakout Groups	All
3:30 - 4:00	Break	
4:00 - 5:30	Break Out Sessions	Group Leads
5:30	Workshop Day #4 Ends	All
6:00	Dinner at the Athenaeum (with spouses and significant others)	

Friday, October 19, 2018 - Keck Center - Think Tank, Room 155

Time	Event	Speaker
8:00 - 8:30	Institute Opens - FREE THINK TIME	
8:30 - 9:00	Coffee and Refreshments at Keck Center	
9:00 - 9:15	Logistics and Team Lead Goals for the Day	Michele Judd and Team Leads
9:15 - 10:00	Breakout Groups Report Out	All
10:00 - 10:30	Open Discussion of Breakout Group Recommendations and Group Feedback	All
10:30 - 11:00	Break	
11:00 - 12:30	Open Discussion of Breakout Group Recommendations and Group Feedback (continued)	All
12:30 - 1:30	Lunch at the Institute	
1:30 - 2:30	Possible Break Out Groups / Advocacy / Illustrations / Path Forward?	All
2:30 - 3:30	Outline of Final Report	All
3:30 - 4:00	Break	
4:00 - 4:45	Final Study Activities and Assignments - Group Discussion	All
4:45 - 5:00	Workshop Closeout	Michele Judd
5:00	Workshop Concludes	