



Interplanetary Laser Trilateration Network

**September 22-26, 2025
Overview Schedule**

**Monday, September 22, 2025
Chen 100 Lecture Hall - Caltech**

Short Course: Interplanetary Laser Trilateration Network

Time	Event	Speaker
8:15 - 8:45	Coffee and Refreshments	
8:45 - 9:00	Logistics / Introduction	Harriet Brettle Team Leads
9:00 - 9:35	Interplanetary Laser Trilateration Network (ILTN)	Bruce Bills
9:35 - 10:10	High-Precision Solar System Dynamics with Interplanetary Laser Ranging	Konstantin Batygin
10:10 - 10:45	Laser Ranging Beyond Lunar Distances	Evan Hoffman
10:45 - 11:15	Break	
11:15 - 11:50	Enabling Planetary Missions with ITLN	Andrea Donnellan
11:50 - 12:30	Future of Solar System Science with ILTN	Mike Watkins
12:30 - 1:30	Short Course Ends: Informal Lunch is provided Chen Building Breezeway	

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	Harriet Brettle
2:30 - 3:00	Participant Introductions	Harriet Brettle
3:00 - 3:30	Study Vision and Goals	Team Leads
3:30 - 4:00	Break	
4:00 - 5:00	Finalize study vision and goals via plenary discussion	Team Leads
5:00 - 5:30	Breakout Group Review	Team Leads
5:30 - 6:00	Pack up and walk to dinner	All
6:00	Group Dinner at local Pasadena Restaurant	

Tuesday, September 23, 2025 - 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 - 9:10	Logistics and Goals for the Day	Harriet Brettle Team Leads
9:10 - 9:45	Expert Session: Laser Ranging Data	John Degnan Evan Hoffman
9:45 - 10:00	Plenary discussion: Science return and science goals to be refined and identified	Marshall Eubanks
10:00 - 10:30	Lightning Talks - Relativity and the ILTN - Sergei Kopeikin - Gravitational Radiation and the ILTN - Carl Gwinn	Sergei Kopeikin Carl Gwinn
10:30 - 11:00	Break	
11:00 - 11:15	Introduction to Breakout Groups and Topics	Harriet Brettle
11:15 - 12:30	Breakout Group 1: What Science is enabled by the ILTN concept? - Planetary - Astronomy and Astrophysics - Planetary Defense - Lunar and Martian Navigation Networks	Groups
12:30 - 2:00	Group Picture and Lunch at Athenaeum	
2:00 - 2:30	Report outs from breakout groups (10 mins each)	Groups
2:30- 3:15	Lightning Talks - Venus atmospheric effects and the ILTN - Anton Ermakov - Performance analysis of the Trilogy mission concept - Lluc Busquets - third talk TBC	Anton Ermakov Lluc Busquets
3:15 - 3:45	Break	
3:45 - 4:00	Plenary Discussion for Breakout Groups	All
4:00 - 5:30	Breakout Group 2: Science Goals to Measurements - Planetary - Astronomy and Astrophysics - Planetary Defense - Lunar and Martian Navigation Networks	Groups
5:30 - 7:30	POSTER-ish SESSION and Informal dinner at the Keck Center (dinner starts at 6:30 pm)	

Wednesday, September 24, 2025 - 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 Goals for the Day	Harriet Brettle Team Leads
9:15 - 9:45	Report Outs from Breakout Groups (10 mins each)	Groups
9:45 - 11:00	Plenary Session: Science Goals and Mission Formulation	Study Leads
11:00 - 11:30	Break	
11:30 - 12:15	Group Pulse: "Taking Away" & "Want to Accomplish Yet"	All
12:15 - 1:45	Lunch at Keck Center	
1:45 - 2:00	Selection of Breakout Groups	All
2:00 - 3:30	Breakout Group Discussion 3: Technology Needs, Status, and Gaps	All
3:30 - 4:00	Break	
4:00 - 4:45	Report outs from breakout groups (15 mins each)	Groups
4:45 - 5:30	Plenary Session - Report Outline Review of ideas and next steps	All
5:30	Workshop Day #3 Ends	All
6:00	OPTIONAL: No-Host Dinner in Pasadena	

Thursday, September 25, 2025 - 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 Goals for the Day	Harriet Brettle Team Leads
9:15 - 10:00	Plenary Discussion: Technology Needs and Gaps	All
10:00 - 10:30	Break	
10:30 - 11:30	KISS Outputs - Study Program Findings and Planning Final Report Plenary Discussion of Final Report	Study Leads and All
11:30 - 12:30	Pen to Paper Working Session - Small Groups	All
12:30 - 2:00	Lunch on your own	
2:00 - 3:00	Plenary Discussion: Revisit the ILTN Mission Concept	Groups
3:00 - 3:30	Break	
3:30 - 4:30	Panel Discussion - Developing ILTN into a viable Mission Concept	Marshall Eubanks (moderator), Jonathan Lunine, Charles Lawrence, Mike Watkins, Andrea Donnellan
4:30 - 5:30	Plenary Discussion of Pen to Paper Session	Groups
5:30 - 6:00	Walk over to the Athenaeum	All
6:00	Closing Dinner at the Athenaeum	

Friday, September 26, 2025 - 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 Goals for the Day	Harriet Brettle Team Leads
9:15 - 10:00	Plenary Discussion: Group Recommendations	All
10:00 - 10:30	Small Group Writing Time	All
10:30 - 11:00	Break	
11:00 - 12:30	Open Discussion of Study Program Findings and Final Report Importance of Illustrations - KISS Gallery	All
12:30 - 1:30	Lunch at Keck Center	
1:30 - 2:00	Workshop Closeout	Harriet Brettle
2:00 - 5:00	Optional Report Writing Time	All
5:00	Institute Closes	