

# Study of the Earth's Deep Interior 2022

## Meeting Overview

	July 11 Mon	July 12 Tue	July 13 Wed	July 14 Thu	July 15 Fri
08:00	<b>Check in</b>				
08:45	<b>Opening</b>				
09:00   12:30	<b>Session 1</b> <b>Mantle Structure and Composition</b>  Chairs: Chairs Andy Nowaki & Paula Koelemeijer	<b>Session 3</b> <b>Core-Mantle Boundary</b>  Chairs: Stéphane Labrosse & Sebastian Rost	<b>Session 5</b> <b>Inner Core</b>  Chairs: Séverine Rosat & Sébastien Merkel	<b>Session 6</b> <b>Outer Core Dynamics and Modelling</b>  Chairs: Alexandre Fournier & Chris Finlay	<b>Session 8</b> <b>Experiments</b>  Chairs: Maylis Landeau & Jérôme Noir
12:30	<b>Lunch</b>		<b>Excursion</b>	<b>Lunch</b>	<b>13:00 Farewell</b>
14:15   17:45	<b>Session 2</b> <b>Mantle History and Dynamics</b>  Chairs: Maxim Ballmer & Bernhard Schuberth	<b>Session 4</b> <b>Outer Core Observations, Structure, Composition</b>  Chairs: Cathy Constable & Nicolas Gillet		<b>Session 7</b> <b>Other Planets: Observations &amp; modelling</b>  Chairs: Doris Breuer & Gaël Choblet	
18:00   20:00	<b>Icebreaker</b>	<b>SEDI Business Meeting</b>	<b>18:00-23:00 Conference Dinner</b>		

# Meeting Agenda

Time	Title	Speaker
<b>July 11 Monday</b>		
08:00 - 08:45	Check in	
08:45 - 09:00	Opening	
<b>Session 1 - Mantle Structure and Composition</b>		
<i>Chairs: Chairs Andy Nowaki &amp; Paula Koelemeijer</i>		
09:00 - 09:50	Keynote Presentation Role of water in deep mantle dynamics	Eiji Ohtani
09:50 - 10:15	Research Talk 1 Locating the iron spin transition in the lower mantle with global adjoint tomography	Laura Cobden (Zatman lecture)
10:15 - 10:40	Research Talk 2 Thermochemical heterogeneities in the mantle transition zone linked to ponding plumes and stagnant slabs	Lauren Waszek
10:40 - 11:40	Poster Viewing and Coffee Break	
11:40 - 12:30	General Discussion	
12:30 - 14:15	Lunch	
<b>Session 2 - Mantle History and Dynamics</b>		
<i>Chairs: Maxim Ballmer &amp; Bernhard Schuberth</i>		
14:15 - 15:05	Keynote Presentation Mantle Circulation Constrained	Huw Davies
15:05 - 15:30	Research Talk 1 Beyond 1D magma ocean models	Charles-Edouard Boukaré
15:30 - 15:55	Research Talk 2 Earth's mantle and lithosphere evolution seen through plumes	Maëlis Arnould
15:55 - 16:55	Poster Viewing and Refreshments	
16:55 - 17:45	General Discussion	
18:00 - 20:00	Icebreaker	
<b>July 12 Tuesday</b>		
<b>Session 3 - Core-Mantle Boundary</b>		
<i>Chairs: Stéphane Labrosse &amp; Sebastian Rost</i>		
09:00 - 09:50	Keynote Presentation Core-mantle chemical interactions from ab initio calculations	Taku Tsuchiya
09:50 - 10:15	Research Talk 1 Lowermost-mantle density and CMB topography from recent normal-mode measurements	Rûna van Tent

Time	Title	Speaker
10:15 - 10:40	Research Talk 2 Geodynamic, geodetic, and seismic constraints favour deflated and dense-cored LLVPs	Frederick Richards
10:40 - 11:40	Poster Viewing and Coffee Break	
11:40 - 12:30	General Discussion	
12:30 - 14:15	Lunch	
<b>Session 4 - Outer Core Observations, Structure, Composition</b>		
<i>Chairs: Cathy Constable &amp; Nicolas Gillet</i>		
14:15 - 15:05	Keynote Presentation Layering around the core-mantle boundary	Sanne Cottaar
15:05 - 15:30	Research Talk 1 Measuring the electrical resistivity of liquid iron at the pressures of planetary cores	Kenji Ohta
15:30 - 15:55	Research Talk 2 Global geomagnetic field on multi-millennial scales	Sanja Panovska
15:55 - 16:55	Poster Viewing and Refreshments	
16:55 - 17:45	General Discussion	
18:00 - 20:00	SEDI Business Meeting	
<b>July 13 Wednesday</b>		
<b>Session 5 - Inner Core</b>		
<i>Chairs: Séverine Rosat &amp; Sébastien Merkel</i>		
09:00 - 09:50	Keynote Presentation The Earth's inner core: a review and way forward	Hrvoje Tkalčić
09:50 - 10:15	Research Talk 1 Melting curve of iron determined in a resistance-heated diamond-anvil cell: implications for the Earth and planetary core	Ryosuke Sinmyo
10:15 - 10:40	Research Talk 2 The dynamic history of the inner core constrained by seismic anisotropy	Daniel Frost
10:40 - 11:40	Poster Viewing and Coffee Break	
11:40 - 12:30	General Discussion	
12:30 -	Excursion	
18:00 - 23:00	Conference Dinner	

Time	Title	Speaker
<b>July 14 Thursday</b>		
<b>Session 6 - Outer Core Dynamics and Modelling</b>		
<i>Chairs: Alexandre Fournier &amp; Chris Finlay</i>		
09:00 - 09:50	Keynote Presentation Rotating convection and the many scales of core dynamics	Michael Calkins
09:50 - 10:15	Research Talk 1 Ohmic dissipation in the Earth's outer core resulting from the free inner core nutation	Yufeng Lin
10:15 - 10:40	Research Talk 2 Influence of libration on a stable layer : an application to Mercury	Ankit Barik
10:40 - 11:40	Poster Viewing and Coffee Break	
11:40 - 12:30	General Discussion	
12:30 - 14:15	Lunch	
<b>Session 7 - Other Planets: Observations &amp; modelling</b>		
<i>Chairs: Doris Breuer &amp; Gaël Choblet</i>		
14:15 - 15:05	Keynote Presentation Seismology on Mars	Amir Khan
15:05 - 15:30	Research Talk 1 Probing icy satellites through their rotation	Anthony Trinh
15:30 - 15:55	Research Talk 2 Thermal convection in icy moons' oceans: the influence of inhomogeneous tidal heating	Daphné Lemasquerier
15:55 - 16:55	Poster Viewing and Refreshments	
16:55 - 17:45	General Discussion	
<b>July 15 Friday</b>		
<b>Session 8 - Experiments</b>		
<i>Chairs: Maylis Landeau &amp; Jérôme Noir</i>		
09:00 - 09:50	Keynote Presentation What do lab experiments tell us about planetary dynamos?	Henri-Claude Nataf
09:50 - 10:15	Research Talk 1 The origins of Si, O, and C in planetary cores	Rebecca Fischer
10:15 - 10:40	Research Talk 2 Experiments on core formation	Victor Lherm
10:40 - 11:10	Special Talk The three meter liquid sodium experiment with a rough inner sphere	Dan Lathrop
11:10 - 12:10	Poster Viewing and Coffee Break	
12:10 - 13:00	General Discussion	
13:00	Farewell	