

TRR 170 Summer School 2022 'Planetary Geodynamics'

Conference hotel: Michel Hotel Braunschweig, Berliner Platz 3, Braunschweig

Transport: Self-organized (by train)

Programm

October 4 (Tuesday)		
18.00 h	arrival	
19:00 h	Dinner (hotel)	

October 5 (Wednesday)		
09:00 - 09:05		
09:05 - 09:35	The Solar system	G. Florin
09:35 - 10.10	Meteorite classification and meteorite forming processes	G. Florin
10:10 - 10:30	Coffee break	
10:30 - 11:20	Nucleosynthetic processes and isotopic variations in meteorites and the solar system	C. Burkhardt
11:20 - 12:20	Disk evolution and planetary accretion models	J. Woo
12:20 - 12:45	Discussion and Questions	Florin/Woo/ Burkhardt
12:45 - 14:00	Lunch break	
14:00 - 15:20	Basic concepts in Geo- and cosmochemistry: (Volatility, geochemical classification of the elements, element partitioning, radioactive, radiogenic and mass-dependent stable isotope fractionations)	E. Scherer
15:20 - 15:40	Coffee break	
15:40 - 17:20	Exercises	E. Scherer
17:20 - 18:00	Discussion and Questions	Scherer
19:00	Dinner (hotel)	

October 6 (Thursday)		
9:00 - 10:00	Geodynamical processes: Basic physical concepts and equations I	U. Hansen
10:00 - 10:15	Coffee break	
10:15 - 11:00	Geodynamical processes: Basic physical concepts and equations II	U. Hansen
11:00 - 12:00	Numerical Modelling - Methods and parameters	C. Stein/ T. Wiesehofer
12:00 - 12:30	Discussion and Questions	Hansen/Stein/ Wiesehofer
12:30 - 13:30	Lunch break	
14:00 - 18.30	PhD students' program Planetarium Wolfsburg: visit with lecture Departure by bus (14:00 h)	Jonas/ Ann-Kathrin
19:00	Dinner (another location)	

October 7 (Friday)		
9:00 - 10:00	Thermo-chemical evolution of terrestrial planets (magma ocean- atmosphere)	D. Breuer
10:00 - 10:15	Coffee break	
10:15 - 11:15	Thermo-chemical evolution of terrestrial planets (crust formation, degassing of secondary atmosphere, mantle reservoir formation ...)	L. Noack
11:15 - 11:30	Discussion and Questions	Breuer/Noack
11:30 - 12:15	101 geodynamic modelling: how to design, interpret, and communicate numerical studies of planets	I. van Zelst
12:30 - 13:30	Lunch break	
13:30 - 14:00	Chemical aspects of planetary silicate differentiation	E. Steenstra
14:00 - 15:00	Exercise	E. Steenstra
15:00 - 15:20	Coffee break	
15:20 - 16:00	Physics of core formation processes in large and small bodies	L. Allibert
16:00 - 16:45	Chemical aspects of core formation	E. Steenstra
16:45 - 17:00	Coffee break	
17:00 - 17:50	Composition and building materials of the terrestrial planets	H. Becker
17:50 - 18:30	Final discussion	van Zelst/ Steenstra/ Allibert/Becker
19:00	Dinner (hotel)	

October 8 (Saturday)		
10:00	departure	