

Mesoscopic Triboelectricity - from Patches to Particles to Planets

759. WE-Heraeus-Seminar

17 Jan – 21 Jan 2022
ONLINE

**WILHELM UND ELSE
HERAEUS-STIFTUNG**



Program

Monday, 17 January 2022

11:00 – 11:15	Scientific organizers	Kick-off / introduction
11:15 – 11:30	Stefan Jorda	About the Wilhelm and Else Heraeus Foundation
11:30 – 12:30	Scott Waitukaitis	Making patch models for same-material tribocharging quantitative
12:30 – 13:30	Nuno Araújo	Dynamics of charged and polarized grains
13:30	Speaker's table	
	<i>DINNER / BREAKFAST / LUNCH</i>	
14:30 – 15:00	Joshua Méndez Harper	Contact and frictional electrification on Mars, Titan, super-Earth GJ1214b, and beyond
15:00 – 15:30	Mingling Area	
15:30 – 16:30	Daniel Lacks	How do charged surfaces lose their charge?
16:30 – 17:00	Poster-Flash A	
17:00 – 18:00	Poster Session A (MeetAnyway)	

Program

Tuesday, 18 January 2022

11:00 – 12:00	Shuji Matsusaka	Characterization and control of particles charged by various methods in electric fields
12:00 – 12:30	Poster Flash B	
12:30 – 13:30	Poster Session B (MeetAnyway)	
13:30	Speaker's table	
	<i>DINNER / BREAKFAST / LUNCH</i>	
14:30 – 15:30	Corrado Cimarelli	The bright side of the plume: volcanic lightning and volcanic ash electrification
15:30 – 16:30	Troy Shinbrot	Asymmetric triboelectrification: unexpected charging patterns
16:30 – 17:00	Rolf Möller	Dynamics of contact electrification
17:00	Speaker's table	

Program

Wednesday, 19 January 2022

11:30 – 12:30	Tatsushi Matsuyama	Limitation of Tribocharging due to Gas Discharge
12:30 – 13:30	Daniel Robert	Electric ecology and aerial electroreception
13:30	Speaker's table	
	<i>DINNER / BREAKFAST / LUNCH</i>	
14:30 – 15:30	Jonathan Merrison	Contact electrification in aerosolized dust
15:30 – 16:30	Christine Hartzell	Tribocharging of Planetary Dust: An experiment and many follow-up questions
16:30 – 17:00	Speaker's table	

Program

Thursday, 20 January 2022

11:30 – 12:30	Marco Mazza	Hydrodynamic description of granular gases interacting via Coulomb forces
12:30 – 13:30	Dietrich Wolf	Collisional cooling, aggregation and cluster stability of charged particles
13:30	Speaker's table <i>DINNER / BREAKFAST / LUNCH</i>	
14:25 – 14:30	Conference photo (MeetAnyway Auditorium)	
14:30 – 15:30	Lorin Matthews	Grain Charging in Astrophysical Environments
15:30 – 16:30	Jacqueline Krim	Triboelectricity and the impact of mobile nanoscale species on friction in macroscale contacts
16:30 – 17:00	Speaker's table	

Program

Friday, 21 January 2022

11:30 – 12:30	Gerhard Wurm	Collisional Charging in Planet Formation
12:30 – 13:30	Hubertus Thomas	Charges on particles in complex/dusty plasmas
13:30	Speaker's table <i>DINNER / BREAKFAST / LUNCH</i>	
14:30 – 15:30	Bilge Baytekin	Static discharging of polymers by light
15:30 – 16:30	Heinrich Jaeger	Collisional Contact Charging in Granular Materials
16:30 – 17:00	Scientific organizers	Conclusion / Poster prize

End of seminar