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# Dissipation Mechanisms in Nano/Mesoscale Tribological Systems | (smr 3713)

## Tuesday 31 May 2022

**notitle - Leonardo Building - Budinich Lecture Hall (09:00-18:00)**

time	title	presenter
09:00	The Fascinating Frictional Properties of Layered Materials	MICHAEL URBAKH
09:30	Colloidal AFM Probes Sliding on Graphite: Triboinduced Material Transfer, Atomic-scale Friction and Superlubricity	RENATO BUZIO
09:50	Fluid-electrons Interactions in Carbon Nanomaterials	ALESSANDRO SIRIA
10:20	Energy Dissipation on Twisted Bilayer Graphene at Magic Angle Twist	MARCIN RAFAL KISIEL
10:40	Coffee Break	
11:10	Nature of Dynamic Friction in a Humid Hydrophobic Nanocontact	IGOR STANKOVIC
11:30	Molecular Nanotribology: Nanomanipulation & Dynamics of Single-Molecules at Surfaces	JOSE GUILHERME VILHENA ALBUQUERQUE D'OREY
12:00	How Adhesion May Interfer in Friction Mechanisms of Viscoelastic Materials?	OLIVIER NOEL
12:20	Thermal Friction Enhancement in Zwitterionic Monolayers	NICOLA MANINI
12:50	Lunch	
14:20	Hard Particle Adhesion and on the Stability of Spinning Asteroids	BO PERSSON
14:50	Effects of Friction in Active Matter	HARTMUT LÖWEN
15:20	Rise and Growth of Critical Instabilities in Systems under Shear	ROBERTO GUERRA
15:40	Plasticity in Nanoscale Friction: Static and Dynamic	JOHN BERNARD PETHICA
16:10	Coffee Break	
16:40	Phase-Transitions in Nano-Friction	ANDRE SCHIRMEISEN
17:10	Anisotropic Frictional Response of Suspended Graphene	ANDREA MESCOLO
17:30	Atomistic Mechanisms of Friction for MoS <sub>2</sub> and Beyond	ASHLIE MARTINI