FLUIDS AND COMPLEXITY WORKSHOPS

Tribology, Mechanics, Rupture, Materials

September 26th, 2022 Centre de mise en forme des matériaux Sophia-Antipolis, rue Claude Daunesse, bâtiment I, salles IR014 et IR015

Have you ever thought about the physical aspects involved when biting a mille-feuilles or cutting a mozzarella?

From indentation of a bilayer with a hard material on top of a softer, plastic one, to the quantitative understanding of the observed shapes in coring, through friction forces in shearing solids, granular media or non-Brownian suspensions, this day will be the occasion to approach experimental and theoretical works on tribology or fracture mechanics.

A free lunch will allow to discuss all these aspects (maybe around a slice of mozzarella or a mille-feuilles).

PROGRAM

09h15 Welcome

09h30 Jérôme Crassous - IPR Plasticity and failure of granular media

10h15 Matteo Ciccotti - SIMM Soft coring: how to get a clarinet out of a flute?

11h00 Coffee break

11h30 Pierre Montmitonnet - CEMEF Multiple fracture during hard-on-soft bilayer indentation 12h00 Elisabeth Lemaire - INPHYNI

Shear-thinning behaviour in non-Brownian suspensions: The role of contact forces

12h30 Meal and Science

13h45 Julien Scheibert - LTDS Shear-induced contact morphology changes in rough elastomer interfaces

14h30 Daniel Pino Munoz - CEMEF How numerical simulations can help us to

understand the physics of material failure?

15h00 Coffee break & Posters

Please register (free): <u>https://evento.renater.fr/survey/workshop-tribology-mechanics-rupture-</u> materials-monday-26th-september-from-9h-to-17h30-cemef-qs8zma2t

DOEBLIN









