International workshop
“Advances in numerical modelling of adhesion and friction”

Preliminary Program

Day 1: Theory and Numerical modelling - Monday 18 November

14.00 - Welcome and Introduction, Nicola Pugno, University of Trento
14.15 - Stiffness and prestress in adherent cells in the light of nonlinear multiple peeling theory (invited), Massimiliano Fraldi, University of Napoli Federico II
15.00 - Boundary element method for adhesive contact and its application to complicated surfaces, Qiang Li, Technische Universität Berlin
15.30 Coffee break
16.00 - Resolving a controversy about adhesion in sliding contacts, Michele Ciavarella, Politecnico di Bari
16.30 - Modelling adhesion and friction with a 2-D spring-block model, Gianluca Costagliola, University of Torino
17.00 - Adhesion between elastic and viscoelastic solids, Lucia Nicola, University of Padova and Delft University of Technology
19.30 Social dinner

Day 2: Applications - Tuesday 19 November

9.15 - Bioinspired Design of Structural and Thermal Interface Materials (invited), Nima Rahbar, Worcester Polytechnic (USA)
10.00 - Biomechanics of shear-sensitive adhesion, David Labonte, Imperial College London
10.30 - Evolution of aerial spider webs towards optimized silk anchorages, Daniele Liprandi, University of Trento
11.00 Coffee break

11.30 - Complex coacervate based adhesives, Larissa van Westerveld, University of Groningen
12.00 - The predictive power of initial bacterial adhesion for estimation of biofilm formation in urinary tract medical devices, Luciana Gomes, University of Porto
12.30 - Influence of surface-modified carbon nanotubes/polydimethylsiloxane composites on bacterial adhesion and biofilm formation, Rita Daniela Teixeira Santos, University of Porto
13.00 - Conclusions, Federico Bosia, University of Torino