

17th GM3 Workshop: Geomechanics from Micro to Macro

Workshop Programme ([Join Zoom Meeting](#))



Monday, 14 December 2020

13.45 – 14.00 (GMT)	Welcome and Introduction to the Workshop GM3 over the last two decades
14.00 – 15.30	Session 1: Chaired by Prof. Malcolm Bolton, Cambridge University, UK Invited Lecture: Prof. Farhang Radjai, Université de Montpellier, France Title: Scaling and rheology of cohesive granular flows Talk 1-1: Experimental and theoretical investigation into the micromechanics of plastic deformation of clays, Dr Bruna Lopes, University of Strathclyde Talk 1-2: Simulating clay cluster formation during compression, Sara Bandera, Imperial College London Talk 1-3: Compaction of deformable granular media, Dr Saeid Nezamabadi, University of Montpellier Talk 1-4: A variational integrator for DEM: towards a quasi-continuum method for granular materials, Dr David de Klerk, University of Glasgow

Coffee Break

15.45 – 17.15	Session 2: Chaired by Prof. Catherine O'Sullivan, Imperial College London, UK Invited Lecture: Dr Francesca Casini, Università degli Studi di Roma Tor Vergata, Italy Title: Effects of freezing-thawing cycle on the behaviour of sand-clay mixtures Talk 2-1: How does sand packing determine effective thermal conductivity?, Tokio Morimoto, Imperial College London Talk 2-2: Porosity and relative density: the missing link, Dr Irene Redaelli, Politecnico di Milano Talk 2-3: Effects of particle shape on the behaviour of sand, Peter Adesina, Imperial College London Talk 2-4: Influence of the shape of the particle size distribution on stress distribution in granular materials, Deyun Liu, Imperial College London
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Tuesday, 15 December 2020

9.00 – 10.30AM	Session 3: Chaired by Dr Marcos Arroyo, Universitat Politècnica de Catalunya, Spain Invited Lecture: Dr Elisabeth Bowman, The University of Sheffield, UK Title: Measuring the granular temperature of granular flows Talk 3-1: Fluid flow in packings of uniform angular particles, Dr Budi Zhao, University College Dublin Talk 3-2: Flow of highly polydisperse granular materials: starting from forces at the particle level, Dr Lu Jing, Northwestern University Talk 3-3: Use of DEM-PFV coupling for predicting the intrinsic permeability of soils, Katia Boschi, Politecnico di Milano Talk 3-4: Quantification of particle breakage and its evolution using statistical entropy, James Leak, Edinburgh Napier University
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Coffee Break

10.45 – 12.30PM	Session 4: Chaired by Dr Joana Fonseca, City University of London, UK Invited Lecture: Prof. Matthew Coop, University College London, UK Title: Particle Scale Mechanics of Sands Talk 4-1: Why sands are not glass beads: liquid bridge asymmetry, Dr Zeynep Karatza, University of Edinburgh Talk 4-2: Deformation and fluid flow within geomaterials, Dr Elli-Maria Charalampidou, Heriot-Watt University Talk 4-3: Experimental data for contact mechanics of railway ballast, Cacin Wong, University College London Talk 4-4: Application of contact models to ballast mechanics, Dr Fatin Altuhafi, University College London Talk 4-5: A study on the evolution of the microstructure under one-dimensional multi-compression for a shelly carbonate sand, Dr Giulia Guida, Politecnico di Milano
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Meeting URL: <https://newcastleuniversity.zoom.us/j/84531568916>
Meeting ID: 845 3156 8916