

INSTITUT D'ETUDES SCIENTIFIQUES DE CARGÈSE

Cargèse International School 2018

MEPHISTO - MEchanics and PHysics of STretchable Objects

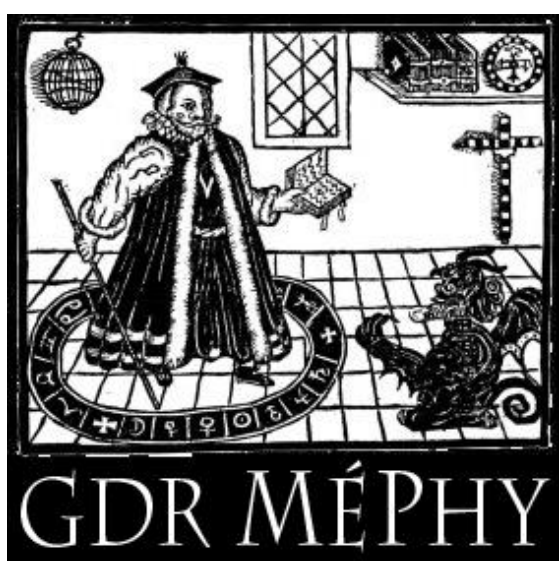
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Web site

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This 10-day school aims at the formation of students and researchers with a double culture in physics and mechanics. It covers a variety of modern topics ranging from material failure, non-linear mechanics and instabilities, to complex and network materials. The courses are designed for a wide audience starting from the beginner level and finishing with high-end tools directly related to state-of-the-art research. Leading international experts will present the latest results on both theoretical and methodological aspects relevant to Soft Complex Materials, with a special emphasis on intercultural perspective. Interventions of professionals from the industry are foreseen to complement this scientific core and to emphasize the proximity of these topics with real-world questions. Poster sessions will provide a natural interface between students and teachers.

Main topics will include

- * Continuum mechanics
- * Numerical methods
- * Fracture and damage mechanics
- * Extreme mechanics
- * Metamaterials
- * Glasses and non-equilibrium behavior
- * Applications.
- * Statistical physics for disordered materials
- * Experimental methods
- * Adhesion and friction
- * Slender media and origami
- * Architected and actuated materials
- * Polymers

Eminent scientists in the field will animate the workshop. These include:

Tristan Baumberger (Sorbonne Univ. Paris FR), Harsha Bhat (ENS Paris FR), Irene Beyerlein (UC Santa Barbara US), Jasna Brujic (NYU US), Marcelo Dias (Aarhus Univ. NL), Mickael Falk (John Hopkins US), Stephan Fauve (ENS Paris FR), Jay Fineberg (Hebrew Univ. Jerusalem IS), François Hild (ENS Cachan FR), Djimedo Kondo (Sorbonne Univ. FR), G. Ravi-Chandar (Austin USA), Pedro Reis (EPFL CH), Benoit Roman (ESPCI FR), Anne Tanguy (INSA Lyon FR)

Scientific Committee

Jasna Brujic (NYU US), Mickael Falk (John Hopkins USA), Laurent Ponson (Sorbonne Univ. FR)

Organization Committee

Matteo Ciccotti (ESPCI FR), Véronique Lazarus (ENSTA Paris-Tech FR), Frederic Lechenault (ENS Paris FR), Benoit Roman (ESPCI FR)

Application and registration

https://www.mephisto-2018.com/spip.php?page=article&id_article=1

Deadline Application : 2018, 15th April

Registration Fees : from 540 € to 840 €

Grants supporting students with limited resources may be available upon request.

