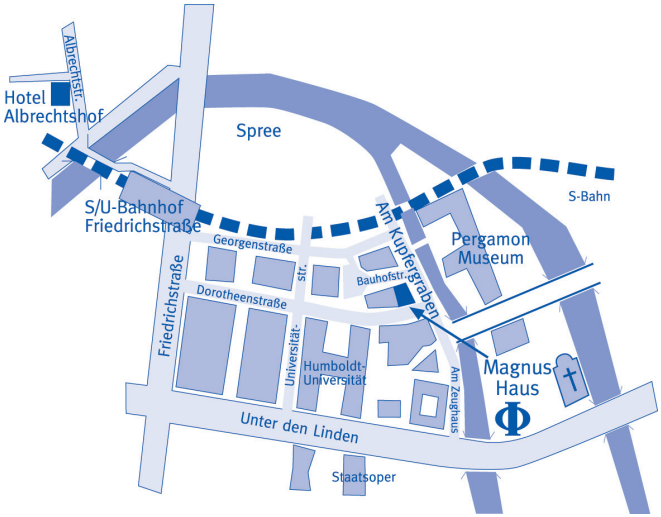

Am Kupfergraben 7
10117 Berlin
Fon ++49-(0)30-201748-0
Fax ++49-(0)30-201748-50
magnus@dpg-physik.de
www.magnus-haus-berlin.de

DPG

Deutsche Physikalische Gesellschaft e. V.

Magnus-Haus Berlin

Lagrange Lecture

Italienische Botschaft in Berlin

Lagrange Lecture

Tuesday, May 7, 2013, 18:30 h

Magnus-Haus Berlin
Am Kupfergraben 7, 10117 Berlin

Welcome
Prof. Dr. Wolfgang Eberhardt
Scientific Director Magnus Haus

Greetings
Dr. Matteo Pardo
Science Attachee of the Italian Embassy in Berlin

Biology inspired Supermaterials From the Space Elevator to Spiderman

Prof. Dr. Nicola Pugno
University of Trento, Italy

The discussion will be chaired by
Prof. Dr. Wolfgang Eberhardt
Scientific Director Magnus-Haus

'Nachsitzung' with food and drinks in the 'Remise' sponsored by the Wilhelm und Else Heraeus-Foundation and Regione Sicilia.

In collaboration with the Italian Embassy in Berlin.

Please register online.

Nicola Pugno, was born in Pavia, Italy, in 1972. He obtained his masters degree (1995) in Mechanical Engineering, a PhD (1998) in Fracture Mechanics, a masters degree (2004) in Theoretical Physics and he is currently following a PhD in Biology. He is now full Professor of Solid and Structural Mechanics at the University of Trento, Italy, where he is the head of the Laboratory of Bio-inspired and Graphene Nanomechanics, co-funded by the European Research Council. He has held visiting positions at several prestigious American (e.g. MIT) and European (e.g. Cambridge) Institutes and Universities. His work on supermaterials based on graphene/carbon nanotubes, spider silk, gecko feet and lotus leaves has led to several well received publications in popular Science Journals, including Nature and Nature Materials.

Abstract:

From the elasticity of blood vessels, to the self-healing properties of bones, the strength of nacre, the smart adhesion of gecko feet, the self-cleaning quality of the lotus leaf, the toughness of the spiderweb, biology offers endless inspiration to nanomechanics, that might also bring some changes in our Life. In this Lagrange Lecture, Nicola Pugno, will present the next wonders from his research on graphene and bio-inspired nanomaterials: from Space elevators to Spiderman suits.