

Gian Paolo Brivio

Doctorate lectures at SDU, Alsion,

14.6.2016, M304, 13:00 – 14:45, available via video link in Odense, Ø29-602-2

Gian Paolo Brivio

He spent several periods outside Italy: post-doctoral fellow at the University of Liverpool, Visiting scientist at the Freie Universität of Berlin, at the University of Munich, and the Max-Planck Institut in Göttingen, (Germany), the University of Cambridge (UK), the University of Alberta (Canada), and University of Princeton (NJ-USA).

Coordinator of the doctoral studies in Materials Science and Nanotechnology at the University of Milano-Bicocca; since 2006, Chairman of the European doctorate in Physics and Chemistry of Advanced Materials (PCAM; Adjunct Professor at the University of Southern Denmark (2015).

His research has focused on theoretical problems in surface and materials science. He estimated first inelastic effects in the dynamics of adsorption-desorption on surfaces. Among the investigated subjects: optical properties of polymers, chaotic dynamics; within the density functional theory (DFT) the Green function formalism for adsorption and the Auger effect. Recently his research group activity has focused on DFT models of transport and magnetism in functionalized graphene, charge transfer at hybrid interfaces, adsorption and optical spectra of dyes, spectroscopic properties of core excited organic molecule. He has regularly published his results on peer review journals, and presented them as contributions and invited papers at international conferences and as seminars at various institutions in Europe, USA, Canada, China and Japan.

13:00 – 13:45 Transport and magnetism in functionalized graphene

- Graphene electrodes and conductivity through a single molecule
- Aromatic radicals on graphene and magnetism
- Adsorbed molecules on graphene: magnetic and non-magnetic systems
- Femtomagnetism of core excited molecules

13:45 – 14:00 Break

14:00 – 14:45 Structural and Core-excited spectroscopic properties of organic adsorbates

- STM and STHM: simulations and comparison with potassium-intercalated PTCDA on silver
- NEXAFS and XPS: pentacene on Aluminum
- Charge transfer and lifetimes of core excited adsorbed molecules on TiO_2 and graphene