

MC18: Physical Properties in Confined Environments, Fundamentals & Applications

Organisateurs : Vittoria Pischedda, David Dunstan, Alfonso San-Miguel

Jeudi 25 août – 15h00- 18h30

15:00 - 15:30	Facilitating irreversible nanotube interlinking using combined ion-implantation pre-processing, high pressures and high temperatures
INVITÉ	
MC18-1	Giovanni Hearne , Liberty Kapesi, Rudolph Erasmus, Mervin Naidoo, Robert Warmbier <i>Department of Physics- University of Johannesburg, DSI-NRF Centre of Excellence in Strong Materials, University of the Witwatersrand</i>
15:30 - 15:50	Raman resonance tuning of quaterthiophene in filled carbon nanotubes at high pressures
KEY	
MC18-2	R.S. Alencar , A.L. Aguiar, R.S. Ferreira, R. Chambard, B. Joussemme, J.-L. Bantignies, C. Weigel, S. Clement, R. Aznar, D. Machon, A.G. Souza Filho, A. San-Miguel, L. Alvarez <i>Faculdade de Física, Universidade Federal do Pará, CEP 66075-110, Belém, PA, Brazil</i>
15:50 - 16:05	Electronic and optical properties of hexagonal boron nitride in extreme conditions
MC18-3	Claudio Attaccalite <i>Aix-Marseille Université, CINaM, Campus de Luminy (Marseille)</i>
16:05 - 16:20	Enhancement of MIL-101(Cr) structural stability by Pd nanoparticles confinement
MC18-4	Francesco Capitani , Anna Celeste, Pierre Fertey, Gabriela Blanita, Claudia Zlotea <i>Synchrotron SOLEIL, L'orme des Merisiers, 91192 Saint-Aubin, Gif sur Yvette Cedex, France</i>
15:20 - 16:35	Strain determination in layered materials refined by quantifying in-plane vibrations coupling between layers
MC18-5	Y. W. Sun , D. Gehringer, D. Holec, D. G. Papageorgiou, O. Fenwick, S. M. Qureshi, C. J. Humphreys and D. J. Dunstan <i>School of Chemical Engineering, University of Birmingham, UK</i>
16h35-17h00 Coffee break	

17:00 - 17:30 Plasticity in oxide nanocubes studied by in situ Transmission Electron Microscopy

INVITÉ

Rongrong Zhang, Lucile Joly Pottuz, Gaëtan Laurens, Tristan Albaret, Jonathan Amodeo, David Dunstan, Frederic Chaput, **Karine Masenelli-Varlot**

MC18-6

Univ Lyon, INSA Lyon, UCBL, MATEIS CNRS UMR5510, 69621 Villeurbanne, France

17:30 - 17:45 High-Pressure Raman spectroscopy studies on Graphene based systems: Suspended versus supported Geometries

MC18-7

V. Rajaji, R. Galafassi, A Forestier, B. S. Araújo, R. Fulcrand, A Piednoir, P Singh, L Marty, F Vialla, A. San-Miguel

Institut Lumière Matière, Univ. Lyon 1-CNRS, Lyon, France.

17:45 - 18:00 Influence of the orientation of metallic nanorods inside a dielectric matrix

MC18-8

P. Kfoury, Y. Battie, Y. Mansour, A. En Naciri, N. Chaoui

LCP-A2MC, Université de Lorraine, ICPM, 1 Bd Arago 57070 Metz, France

18:00 - 18:15 Deterministic Graphene Folds through Ultrafast Laser Nanotexturing: Technology and Applications

MC18-9

A.F. Juarez-Saborio, F. Bouquard, V. Barnier, F. Vialla, A. Piednoir, R. Galafassi, R. Fulcrand, F. Garrelie et A. San-Miguel

Université Jean Monnet-Saint-Etienne, CNRS, Institut d'Optique Graduate School, Laboratoire Hubert Curien & Institut Lumière Matière, UCBL-CNRS, Lyon, France.

18:15 - 18:30 Probing reversible structural changes in single walled carbon nanotubes at high pressure: radial collapse

MC18-10

Riccardo Galafassi, Fabien Vialla, Vittoria Pischetta, Alfonso San Miguel

Institut Lumière Matière, Univ. Lyon 1-CNRS, Lyon, France.

Posters

MC18-11

Experimental and Monte-Carlo studies of interdiffusion in Fe/Cr superlattices

Véronique Pierron-Bohnes, Pamela Camilos, Gladice Magnifouet, Maxime Vallet, Estelle Meslin, Frédéric Soisson and Maylise Nastar

IPCMS CNRS-Unistra, Département du magnétisme des objets nanostructurés, Strasbourg, France

MC18-12

High Pressure study of Suspended single and few-Layer MoS₂

Bruno Sousa Araújo, Riccardo Galafassi, Rajaji vincent, Fabien Vialla, Rafael Silva Alencar, Antônio Gomes Souza Filho, Alfonso San Miguel

Institut Lumière Matière, Univ. Lyon 1-CNRS, Lyon, France & Departamento de Física, Universidade Federal do Ceará, Fortaleza, Brasil

MC18-13

Photo-induced paramagnetic states in ZnO nanoparticles

Dara Marin, S.Bertaina, O. Margeat, G. Gerbaud and A. Savoyant

Aix-Marseille Université, CNRS, IM2NP UMR 7334, Marseille, France

MC18-14

Sintering of Nanodiamonds using SPS, in situ Analysis under High Pressure and High Temperature Conditions

T. Gaudisson, Y. Le Godec, **V. Pishedda**, M. Dubois, N. Guignot, L. Henry, S. Le Floch
Institut Lumière Matière, Univ. Lyon 1-CNRS, Lyon, France.

MC18-15

Generating heterostructures by extreme conditions in low dimensional systems

R. Galafassi, A. Forestier, B. S. Araújo, V. Rajaji, R.S. Ferreira, S.D. Silva-Santos, F. Violla, C. Bousige, Y. Magnin, D. Dunstan, A. G. S. Filho, R.S. Alencar, A.L Aguiar, and **A. San-Miguel**
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