

TENTATIVE PROGRAM (as of 06/07/2020)

K: Keynote lecture / I: Invited Lecture / O: Oral contribution / FP: FlashPoster contribution



Tuesday (07/07/2020)



08:50 – 09:00: Opening - Welcome and Introduction

Antonio Correia (Phantoms foundation, Spain)

Jean-Christophe Charlier (UCLouvain, Belgium)

09:00 – 09:30: **Zhongfan Liu** (Peking University, China) K

Targeting the Mass Production of CVD Graphene

09:30 – 10:00: **Dmitri Efetov** (ICFO, Spain) K

Magic Angle Bilayer Graphene - Superconductors, Orbital Magnets, Correlated States and beyond

10:00 – 10:30: **Hui-Ming Cheng** (Chinese Academy of Sciences, China) K

Mass Production of 2D Materials by Exfoliation and Their Applications

10:30– 10:45: *Break*

10:45 – 11:15: **FlashPoster Session**

11:15 – 11:45: **Andrea Ferrari** (University of Cambridge/CGC, UK) K

Layered Materials Optoelectronics

11:45 – 12:15: **Max Lemme** (AMO GmbH, Germany) K

Electronic Devices based on 2D Materials – Opportunities and Open Challenges

12:15 – 12:45: **Cinzia Casiraghi** (University of Manchester, UK) K

Biocompatible 2D Material-based Inks: from Printed Electronics to Biomedical Applications

12:45 – 13:30: **ePosters session**

13:30 – 14:15: *Lunch Break*

14:15 – 14:45: **Stephan Roche** (ICREA/ICN2, Spain) K

Emerging Properties in Two-dimensional. Strongly Disordered & Amorphous Membranes

14:45 – 15:15: **Mauricio Terrones** (The Pennsylvania State University, USA) K

Defects in 2D Metal Dichalcogenides: Doping, Alloys, Vacancies and Their Effects in Magnetism, Electronics, Catalysis, Optical Emission and Bio-Applications

15:15 – 15:35: **Yuan Ping** (UC Santa Cruz, USA) I

Spin-phonon relaxation from a universal ab initio density-matrix approach

15:35 – 15:50: *Break*

15:50 – 17:10: **Oral Parallel sessions**

ROOM 1

15:50 – 16:00: **Khaled Parvez** (University of Manchester, UK) O

Inkjet printable water-based inks made by electrochemically exfoliated Graphene

16:00 – 16: 10: **María Tenorio** (Catalan Institute of Nanoscience and Nanotechnology, Spain) O

Imprinting chirality and doping in graphene nanopores

16:10 – 16: 20: **Xubin Lu** (Martin-Luther University Halle-Wittenberg, Germany) O

Plasma-etched functionalized graphene as a metal-free electrode catalyst in solid acid fuel cells

16:20 – 16: 30: **Smita Talande** (RCPTM, Czech Republic) O

FeOOH/Cyanographene hybrid material for efficient operation in organic electrolytes as supercapacitor electrode

16:30 – 16: 40: **Jean-Christophe Blancon** (Rice University, USA) O
 Understanding the excitonic physics of organic-inorganic 2D perovskites for efficient and low-cost photovoltaics
 16:40 – 16: 50: **Jaime Sanchez** (Chalmers University of Technology, Sweden) O
 Electrophoretic coating of LiFePO₄/Graphene oxide on Carbon Fibers as High-Performance Cathode Electrodes for Structural Batteries in Aeronautics
 16:50 – 17:00: **Vladimir Pimonov** (L2C university of Montpellier, France) O
 Optical studies of the growth kinetics of individual carbon nanotubes
 17:00 – 17:10: **Elena Bruno** (University of Catania, Italy) O
 N-doping in 3D graphene foams by chemical vapour deposition

ROOM 2

15:50 – 16:00: **Haixin Qiu** (University of Strasbourg, CNRS, ISIS UMR 7006, France) O
 Optical Tuning of Hole and Electron Transport in Ambipolar WSe₂ Interfaced with a Bicomponent Photochromic Layer: From High-Mobility Transistors to Flexible Multilevel Memories
 16:00 – 16: 10: **Maria Ramos** (Universidad de Alicante, Spain) O
 Ultra-broad spectral photoresponse in FePS₃ air-stable devices
 16:10 – 16: 20: **Laura Serkovic-Loli** (Centro Atómico Bariloche, Argentina) O
 Graphene field effect transistors using TiO₂ as the dielectric layer
 16:20 – 16: 30: **Elena del Corro** (Instituto Catalán de Nanociencia y Nanotecnología, Spain) O
 Electronic interactions at the graphene interface: the effect of substrate and the media
 16:30 – 16: 40: **Mattia Scagliotti** (University of Rome "Tor Vergata", Italy) O
 Fast response, high responsivity and broadband Graphene/n-Si photodetector
 16:40 – 16: 50: **Filipa Silva** (INEB - Inst. Nac. Engenharia Biomédica, Portugal) O
 Nanographene oxide and PEGylated reduced nanographene oxide as platforms for anti-cancer drug delivery
 16:50 – 17:00: **Isaac Alcon** (Freie Universität Berlin, Germany) O
 Quantum Interference Engineering of Nanoporous Graphene for Carbon Nanocircuitry

ROOM 3

15:50 – 16:00: **Igor Lukačević** (Josip Juraj Strossmayer University of Osijek, Croatia (Hrvatska)) O
 Suitable substrates for the synthesis of stable aluminene allotropes
 16:00 – 16: 10: **Anthony Impellizzeri** (Institut des Matériaux Jean Rouxel, France) O
 Development of ab-initio method to multiwave-length dependent Raman spectroscopy of 2D-nanomaterials
 16:10 – 16: 20: **Aurélie Champagne** (Université Catholique de Louvain (UCLouvain), Belgium) O
 MXenes: the largest family of 2D materials
 16:20 – 16: 30: **Sarah Pinon** (Institut de Physique Théorique, France) O
 Boundary modes using impurities: graphene and the Kane-Mele topological insulator
 16:30 – 16: 40: **Antonio Gallerati** (Politecnico di Torino, Italy) O
 Dirac fields in curved graphene
 16:40 – 16: 50: **Urvesh Patil** (Trinity College Dublin, Ireland) O
 Solvent interactions with two-dimensional materials: A computational investigation of the dispersion of graphene monolayers in commonly used solvents
 16:50 – 17:00: **Jose Hugo Garcia Aguilar** (Catalan Institute of Nanoscience and Nanotechnology, Spain) O
 Charge-to-Spin Conversion in Low-Symmetry Topological Materials
 17:00 – 17:10: **Thomas Stegmann** (Universidad Nacional Autónoma de México, Mexico) O
 Electron Optics in Phosphorene pn Junctions: Negative Reflection & Anti-Super-Klein Tunneling

17:10 – 17:25: Break

17:25 – 17:45: **Marcelo Lozada-Hidalgo** (University of Manchester, UK) I
 Ion permeation through atomically thin crystals
 17:45 – 18:15: **Cristiane Morais Smith** (Utrecht University, The Netherlands) K
 Atom-to-atom designed graphene-like structures
 18:15 Closing