

**MC 39 2D Materials beyond graphene: from fundamental studies to enabling technologies**

Wednesday, 4 September, afternoon

Chair: Andrea Capasso, Luca Camilli

Room:

Hours	ID	Name	Type	Title
16h00-16h30	13687	Luis E. Hueso	Invited	Spin texture control with low symmetry 2D heterostructures
16h30-16h45	13510	A. Kimouche	Oral	Van der Waals Epitaxy of a Magnetic Transition Metal Dihalide
16h45-17h00	13055	Lionel Calmels	Oral	Tuning the spin-orbit coupling, magnetic proximity, and band hybridization in Fe/MgO/MoS ₂ multilayers
17h00-17h15	12924	A. T. Raji	Oral	Proximity-induced spin interactions in vanadium-embedded silicene layer
17h15-17h45	13432	Arindam Ghosh	Invited	Low-frequency noise in the heterostructures of near-magic angle twisted bilayer graphene and transition metal dichalcogenide
17h45-18h00	13617	Pedro Ninhos	Oral	Tunable exciton-polaritons in band gap engineered hexagonal boron nitride
18h00-18h15	13710	E. Bonaventura	Oral	From the optothermal response to an effective thermal conductivity in supported silicene
18h15-18h30	12704	Ofelia Durante	Oral	Exploration of Electrical and Optoelectronic Properties of Van der Waals BP/MoS ₂ Heterostructures

Thursday, 5 September, morning

Chair: Carlo Grazianetti, Andrea Capasso

Room:

Hours	ID	Name	Type	Title
10h30-11h00	13529	Olivia Pulci	Invited	Electronic and optical properties of 2-D materials beyond graphene: effect of gating, twisting, and of the substrate
11h00-11h15	13024	Juan A. Delgado Notario	Oral	Terahertz Photoresponse in Graphene Moiré Superlattices
11h15-11h30	13777	José Joaquín Pérez Grau	Oral	Layer-dependent evolution of the optical properties in 2D CrI ₃ mapped by hyperspectral imaging
11h30-11h45	12995	Stefan T. Bromley	Oral	Towards new 2D quantum materials from single-layer chemically-expanded graphenic lattices
11h45-12h15	12758	Mário Amado	Invited	Superballistic conduction in antidot graphene superlattices



12h15-12h30	13517	Lorenzo Poggini	Oral	Antiferromagnetic Strong Interactions in Chains of Molecular Qubits adsorbed on Graphene
12h30-12h45	13673	Lucia Vitali	Oral	Topological states in a pseudo-kagomé lattice

Thursday, 5 September, afternoon**Chair: Christian Martelli, Mario Amado****Room:**

Hours	ID	Name	Type	Title
16.00-16h30	14041	Antonio Lombardo	Invited	Resistive Switching in Insulator-Semiconductor Structures produced via Controlled Oxidation of 2D Layered Materials
16h30-16h45	13810	Guilherme Araújo	Oral	Interface engineering in 2D MoSe ₂ memristive devices
16h45-17h00	13105	Alessandro Baserga	Oral	Ultrafast broadband optical spectroscopy of a layered metal phosphorus trichalcogenide
17h00-17h15	14040	Mateo Barelli	Oral	Large area periodically modulated 2D Transition Metal Dichalcogenide layers featuring flat-optics and strain engineering
17h15-17h45	13809	Laura de Sousa Oliveira	Oral	Modeling insights on the electron and phonon transport of two-dimensional covalent- and metal-organic frameworks
17h45-18h00	13045	Luca Persichetti	Oral	Oxidation and hydroxylation of 2D GeAs
18h00-18h15	13821	Siva Sankar Nemala	Oral	Advanced liquid phase exfoliation methods for 2D crystals technology

Friday, 6 September, morning**Chair: José Caridad, Luca Camilli****Room:**

Hours	ID	Name	Type	Title
9h00-9h30	14042	P. Alonso-González	Invited	Photonic Magic Angles in α -MoO ₃ Trilayers
9h30-9h45	12603	D. R. Pereira	Oral	2D-MoO ₃ nanostructures for Field Effect Transistors and biosensing applications
9h45-10h00	12992	Nuria Jiménez-Arévalo	Oral	X-ray photoelectron spectroscopy of high-throughput mechanically exfoliated van der Waals materials
10h00-10h15	12651	Selçuk Parlak	Oral	Raman scattering in two dimensional Dirac insulators
10h15-10h30	12795	Shaili Sett	Oral	Impact of antiferroelectric moiré domains on a graphene field-effect transistor
10h30-10h45	13286	Sergio Tosoni	Oral	Interface-driven Assembly of Pentacene/MoS ₂ Lateral Heterostructures: A Combined STM and DFT Study



Poster Session

Thursday, 5 September, afternoon

ID	Name	Title
13814	Marcelo Barreiro	Exciton generation by inelastic tunnelling in heterostructures with two-dimensional semiconductors
13798	Vicente Lopes	Chemical vapor deposited 2D crystals for advanced technologies
13361	Subrata Rakshit	Double layer boron structures
12590	E. Amar	Large-area synthesis of hexagonal boron nitride thin films grown by atomic pressure chemical vapor deposition