

LDSD 2019

The 9th International Conference
on Low Dimensional Structures and Devices

Puerto Varas (Chile), 2-6 December 2019.

Program

9th International Conference on Low Dimensional Structures and Devices, Puerto Varas, Chile 2019

Schedule

		Monday	Tuesday	Wednesday	Thursday	Friday	
9:00	9:40	Registration	Caio Lewenkopf	Gonzalo Usaj	Jutta Schwarzkopf		
9:40	10:00		Philipp Stegmann	Adrian Del Maestro	Perla Kacman	Marcel Mayor	
10:00	10:20		Thomas Stegmann	Magdalena Marciniak	Walter Orellana	Latha Venkataraman	
10:20	10:40			Andrés Cantarero	Sebastián Reyes		
10:40	11:10		Coffee break	Coffee break	Coffee break	Coffee break	
11:10	11:50	Opening	Jean-Christophe Charlier	James Lott	Umberto Celano	Herre Van Der Zant	
11:50	12:30	Zeila Zanolli	Sergio Ulloa	Ramón Cuscó	Felipe Herrera	Mickael Perrin	
12:30	14:30	Lunch	Lunch	Lunch	Lunch	Closing	
14:30	15:10	María José Sánchez	Andrea Latgé		Simón Oyarzún		
15:10	15:50	Erick Burgos-Parra	Gueorgui Gueorgiev		Ming Wei Wu		
		Francisco Muñoz	Eric Suárez Morell		Víctor Fuenzalida		
15:50	16:20	Coffee break	Poster session		Coffee break		
16:20	16:40	John Villanova					
16:40	17:00	Alexei Orlov					
17:00	17:20						
17:20	17:40						
20:00	22:00				Conference dinner		



UNIVERSIDAD
TÉCNICA
FEDERICO
SANTA MARÍA



The University of
Nottingham



Monday, December 2nd

9:00 – 11:30 Registration

11:30 – 11:50 Opening

11:50 – 12:30 **Zeila Zanolli**, ICN2, Spain, "*Ab initio exciton and phonon dynamics in Transition Metal Dichalcogenides*" [abstract]

12:30 – 14:30 Lunch

14:30 – 15:10 **María José Sánchez**, Centro Atómico Bariloche, Argentina, "*Quantum control of qubits based on solid state superconducting devices*" [abstract]

15:10 – 15:30 **E. Burgos-Parra**, SOLEIL and CNRS, France, "Field dependence chirality in ferromagnetic multilayers probed by dichroism in x-ray resonant magnetic scattering" [abstract]

15:30 – 15:50 **F. Muñoz**, Universidad de Chile, Chile, "*Hematene: a 2D magnetic material in van der Waals or non-van der Waals heterostructures*" [abstract]

15:50 – 16:20 Coffee break

16:20 – 16:40 **John Villanova**, University of Arkansas, USA, "*Structural constraints and the spatial electronic distribution determine the transition temperature of two-dimensional ferroelectrics*" [abstract]

16:40 – 17:00 **Alexei Orlov**, Universidad de Chile, Chile, "*Hematene: a 2D magnetic material in van der Waals or non-van der Waals heterostructures*" [abstract]

Tuesday, December 3rd

- 9:00 – 9:40 **Caio Lewenkopf**, Univ. Federal Fluminense, Brazil, “*Backscattering due to defects in the topological insulator phase induced by adatoms in graphene*” [abstract]
- 9:40 – 10:05 **Philipp Stegmann**, University of Duisburg-Essen, Germany, “*Optical Detection of Single-Electron Tunneling Statistics for a Self-Assembled Quantum Dot*” [abstract]
- 10:00 – 10:30 **Thomas Stegmann**, Universidad Nacional Autónoma de México, Mexico, “*Electron optics in phosphorene pn junctions: Negative reflection and anti-super-Klein tunneling*” [abstract]
- 10:40 – 11:10 Coffee break
- 11:10 – 11:50 **Jean-Christophe Charlier**, University of Louvain, Belgium, “*Optical Hall effect, Veselago lensing and superlattices in graphene*” [abstract]
- 11:50 – 12:30 **Sergio Ulloa**, Ohio University, USA, “*Edges and interfaces in 2D materials: novel 1D tunable physical platforms*” [abstract]
- 12:30 – 14:30 Lunch
- 14:30 – 15:10 **Andrea Latgé**, Univ. Federal Fluminense, Brazil, “*Strained graphene in the quantum Hall Regime: valley splitting and extra conducting channels*” [abstract]
- 15:10 – 15:30 **Georgui Gueorgiev**, Linköping University, Sweden, “*Comprehension of intercalation phenomena at graphene/SiC interface by ab-initio molecular dynamics*” [abstract]
- 15:30 – 15:50 **Eric Suárez Morell**, Universidad Técnica Federico Santa María, Chile, “*Gaps in twisted double bilayer graphene*” [abstract]
- 15:50 – 18:00 Poster Session

Wednesday, December 4rd

- 9:00 – 9:40 **Gonzalo Usaj**, Centro Atómico Bariloche and CONICET, Argentina, “*Building topological properties in artificial quantum systems*” [abstract]
- 9:40 – 10:00 **Adrián Del Maestro**, University of Vermont, USA, “*Nanoscale confinement towards a one-dimensional superfluid*” [abstract]
- 10:00 – 10:20 **Magdalena Marciniak**, Lodz University of Technology, Poland, “*Monolithic High Contrast Gratings – highly reflective mirrors for VCSELs*” [abstract]
- 10:20 – 10:40 **Andrés Cantarero**, University of Valencia, Spain, “*GaN silent modes in Raman spectroscopy*” [abstract]
- 10:40 – 11:10 Coffee break
- 11:10 – 11:50 **James A. Lott**, Technische Universität Berlin, Germany, “*Nanostructured vertical cavity surface emitting lasers*” [abstract]
- 11:50 – 12:30 **Ramón Cuscó**, Institut Jaume Almera (ICTJA-CSIC), Spain, “*Isotope effects on the intra- and inter-layer phonons in layered van der Waals crystals: influence on the h-BN phonon lifetimes*” [abstract]
- 12:30 – 14:30 Lunch

Thursday, December 5th

- 9:00 – 9:40 **Jutta Schwarzkopf**, Leibniz-Institute for Crystal Growth, Berlin, Germany, “*Impact of strain on nanoscale domains in $KxNa_{1-x}NbO_3$ ferroelectric thin films*” [abstract]
- 9:40 – 10:00 **Perla Kacman**, Institute of Physics, Polish Academy of Sciences, Poland, “*K-shape InAs Nanowires; The Role of Gold Droplets in the Growth of Inclined Nanowires*” [abstract]
- 10:00 – 10:20 **Walter Orellana**, Universidad Andrés Bello, Chile, “*Porphyrin dyes attached on $TiO_2(101)$: Electronic and optical properties from ab initio calculations*” [abstract]
- 10:20 – 10:40 **Sebastián Reyes**, Universidad Andrés Bello, Chile, “*Intrinsic Point Defects in Atomically Layered Lead Halide Perovskites*”
- 10:40 – 11:10 Coffee break
- 11:10 – 11:50 **Umberto Celano**, IMEC, Belgium, “*Nanoscale Electrical Characterization of Low Dimensional Materials for Electronics*”
- 11:50 – 12:30 **Felipe Herrera**, Universidad de Santiago de Chile, Chile, “*Controlling chemistry with quantum optics at the nanoscale*” [abstract]
- 12:30 – 14:30 Lunch
- 14:30 – 15:10 **Simón Oyarzún**, USACH, Chile, “*Spin pumping and spin-orbit effects in Ge*” [abstract]
- 15:10 – 15:50 **Ming-Wei Wu**, Hefei National Laboratory of Physical Sciences at Microscale, China, “*Gauge- invariant microscopic kinetic theory of superconductivity*” [abstract]
- 16:40 – 17:00 **Víctor Fuenzalida**, University of Chile, Chile, “*Electroadsorptive effect: Nitrogen Oxide on a Semiconductor Surface*” [abstract]
- 17:00 – 17:30 Coffee break
- 20:00 – 22:00 Conference dinner

Friday, December 6th

9:20 – 10:00 **Marcel Mayor**, University of Basel, Switzerland, “*Integrated Single-Molecule Devices*” [abstract]

10:00 – 10:40 **Latha Venkataraman**, Columbia University, USA, title to be confirmed

10:40 – 11:10 Coffee break

11:10 – 11:50 **Herre van der Zant**, TU Delft, Netherlands, “*Quantum transport phenomena in three-terminal, single-molecule junctions*” [abstract]

11:50 – 12:30 **Mickael Perrin**, EMPA, Switzerland, “*Device integration of atomically precise graphene nanoribbons*” [abstract]

12:30 – 12:40 Closing remarks

Sponsored by



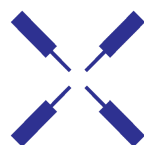
MILLENNIUM NUCLEUS
MULTIMAT
MULTIFUNCTIONAL MATERIALS FOR
APPLIED SURFACE SCIENCE



*condensed
matter*



Fondecyt
Fondo Nacional de Desarrollo
Científico y Tecnológico



Zurich
Instruments

HEIDELBERG
INSTRUMENTS

 **KORVUS TECHNOLOGY**

SPECS™ IOP Publishing



MUTECH
Microsystems

