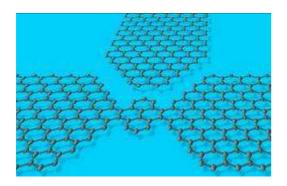
### **ESF Conference in Partnership with LFUI**

# Graphene Week 2011: Fundamental Science of Graphene and Applications of Graphene-Based Devices

# 24-29 April 2011 Universitätszentrum Obergurgl, Austria



### In Partnership with:



# Chaired by:rotenberg

- Vladimir Falko, Lancaster University, UK
- Andre Geim, University of Manchester, UK
- Karsten Horn, Fritz-Haber-Institut Berlin, DE
- Sankar Das Sarma, University of Maryland, US

Sunday 24 April		
17:00 – 19:00	Registration at ESF desk	
19:00 – 19:30	Welcome drink	
19:30 – 20:30	Dinner	
20:30	Conference Opening and Welcome Chair: Andre Geim, Manchester University, UK	
	Samindranath Mitra, Physical Review Letters, US Publishing in PRL	
	Ana Helman, European Science Foundation, FR Eurocores programme Eurographene	
	Vladimir Falko, Lancaster University, UK EU Flagship initiative	
Monday 25 April		
Session I – Chair: I	Session I – Chair: Karsten Horn, Fritz-Haber-Institut der Max-Planck-Gesellschaft, DE	
8:30 -9:10	Byung Hee Hong, Sungkyunkwan University, KR Recent Progress in Graphene Synthesis and Applications	
9:10 - 9:50	Hongjun Gao, Chinese Academy of Sciences, CN Epitaxial growth of graphene on crystalline metal surfaces and scanning tunneling	

	microscopy/spectroscopy
9:50 – 10:30	Yuriy Dedkov, Fritz-Haber-Institut der Max-Planck-Gesellschaft, DE Electronic and magnetic properties of the graphene-ferromagnet interface
10:30 - 11:00	Coffee break
Session II - Chair	: Maki Suemitsu, Tohoku University, JP
11:00 – 11:40	Rositza Yakimova, Linköping University, SE Morphological stability of graphene on SiC
11:40 – 12:00	Jan-Theodoor Janssen, National Physical Laboratory, UK Universality test of the quantum Hall effect using epitaxial graphene
12:00 - 12:40	Tomas Palacios, Massachusetts Institute of Technology, US Graphene Devices and Circuits for RF Communications and Sensing
12:40 – 13:00	<b>Takeshi Nakanishi</b> , <i>National Inst. of Advanced Industrial Sci. and Tech, JP</i> Electron transmission through boundary between multilayer graphenes
13:00 - 14:00	Lunch
14:00 – 16:30	Discussions
16:30 – 17:00	Coffee break
Session III - Chair	Reza Asgari, Institute for Reserach in Fundamental Sciences, IR
17:00 – 17:20	<b>Tohru Kawarabayashi</b> , <i>Toho University, JP</i> Robustness of zero-modes and generalised chiral symmetry for tilted Dirac cones with disorder
17:20 – 17:40	Irina Grigorieva, University of Manchester, UK Magnetism in pure and defected graphene
17:4 0 – 18:20	Feng Wang, University of California, US Tunable Optical Phenomena in Graphene
18:30 – 20:00	Dinner
20:00 – 22:00	Poster session I
	Please note that posters are split in two different sessions: you can refer to the list at the end of the programme to see when your poster will be displayed
Tuesday 26 April	
Session IV - Chai	r: Peter Blake, University of Manchester, UK
8:30 – 9:10	James Hone, Columbia University, US Graphene NEMS and graphene/BN electronics
9:10 – 9:30	Leonid Ponomarenko, University of Manchester, UK Giant Nonlocality and Flavor Currents near the Dirac Point in Graphene
9:30 - 9:50	Yang Wang, University of California, US Local Electronic Structure of Graphene on Boron Nitride and Near Charged Impurities: an STM Study
9:50 – 10:10	Irene Calizo, National Institute of Standards and Technology, US Etching of graphene by metallic nanoparticles
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10:10 – 10:30	Mahdi Pourfath, Technische Universität Wien, AT Thermal and Thermoelectric Properties of Graphene Antidot Lattices: A Theoretical Study
10:30 – 11:00	Coffee Break
Session V – Chair A	Alexander Tzalenchuck, National Physical Laboratory Management Limited, UK
11:00 – 11:40	Francisco Guinea, Instituto de Ciencia de Materiales de Madrid, ES lecture to be announced
11:40 – 12:00	Akinobu Kanda, <i>University of Tsukuba, JP</i> Introducing strain in graphene
12:00 – 12:20	Ursel Bangert, The University of Manchester, UK Scanning Tunneling microscopy of suspended Graphene
12:20 – 13:00	Brian LeRoy, University of Arizona, US Scanning tunneling spectroscopy of graphene on BN and SiO2
13:00 – 14:00	Lunch
14:00 – 16:30	Discussions
16:30 – 17:00	Coffee Break
Session VI – Chair:	Ken-Ichi Shizuya, Kyoto University, JP
17:00 -17:40	Alexey Kuzmenko, University of Geneva, CH Infrared Hall studies of epitaxial graphene
17:40 – 18:00	Sergey Ganichev, University of Regensburg, DE Terahertz Radiation Induced Edge Currents in Graphene
18:00 – 18:20	<b>Dmitri Efetov</b> , Columbia University, US Transport properties of single and bilayer graphene samples at extremely high carrier densities
18:20 – 19:00	Antonio Castro Neto, NUS and BU, US Strain Engineering in Graphene
19:30	Dinner
Wednesday 27 Apr	il
Session VII – Chair	: Wlodek Strupinski, Institute of Electronic Materials Technology, PL
8:30 – 9:10	Thomas Seyller, University of Erlangen-Nürnberg, DE Recent progress in epitaxial graphene on SiC(0001)
9:10 – 9:50	Eli Rotenberg, Lawrence Berkeley National Laboratory, US Characterization of Plasmaronic Quasiparticles in Graphene
9:50 – 10:10	Marco Polini, NEST, Istituto Nanoscienze-CNR, IT Many-Body Orbital Paramagnetism in Doped Graphene Sheets
10:10 – 10:30	Michael Fogler, UC San Diego, US Nanoplasmonics with graphene
10:30 - 11:00	Coffee Break and group picture

Session VIII - Cha	air: Sergey Kubatkin, Chalmers University of Technology, SE
11:00 - 11:20	Bart Van Wees, University of Groningen, NL Quantized conductance of a suspended graphene nanoconstriction in zero magnetic field
11:20 – 11:40	Bernd Beschoten, RWTH Aachen University, DE Spin transport in bilayer graphene
11:40 – 12:20	Euyheon Hwang, University of Maryland, US Electron-Phonon interaction effects in Graphene
12:20 – 13:00	Reza Asgari, Institute for Reserach in Fundamental Sciences, IR Effective pseudo-magnetic fields in circular graphene rings and graphene nanobubbles
13:00 – 14:00	Lunch
14:00 – 16:30	Discussion
16:30 - 17:00	Coffee Break
Session IX Chair:	Toshihito Osada, University of Tokyo, JP
17:00 – 17:40	Michael Fuhrer, University of Maryland at College Park, US Probing disorder, correlations and phase transitions in adsorbates on graphene
17:40 – 18:00	Masahiro Ishigami, University of Central Florida, US Revealing the native scatterers in graphene using atomic hydrogen
18:30 – 20:00	Dinner
20:00 – 22:00	Poster session II  Please note that posters are split in two different sessions: you can refer to the list at the end of the programme to see when your poster will be displayed
Thursday 28 April	
Session X Chair:	Antonino La Magna, Consiglio Nazionale delle Ricerche, IT
8:30 – 9:10	Charles Marcus, Harvard University, US lecture to be announced
9:10 – 9:30	Christoph Stampfer, RWTH Aachen, DE Spin states in a bi-layer graphene double quantum dot
9:30 - 9:50	Xuefeng Song, Aalto University, FI Graphene mechanical resonator for electrical cavities
9:50 – 10:10	Thomas Ihn, ETH Zurich, CH Electronic Transport in Graphene Nanostructures
10:10 – 10:30	Wenzhong Bao, University of California, US Quantum Transport in Suspended Graphene Devices
10:30 – 11:00	Coffee break
Session XI Chair: Kazuhito Uchida, University of Tokyo, JP	
11:00 - 11:20	Marcin Mucha-Kruczynski, Lancaster University, UK

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	Bilayer graphene under strain
11:20 – 11:40	Christian Schoenenberger, University of Basel, CH Interaction induced gap in high-mobility suspended bilayer graphene
11:40 – 12:20	Roman Gorbachev, Manchester University,, UK Multilayer graphene/BN heterostuctures.
12:20 – 13:00	Amir Yacoby, Harvard University, US lecture to be announced
13:00 – 14:30	Lunch
14:30 – 16:30	Discussions
16:30 – 17:00	Coffee Break
Session XII Chair:	Thomas Greber, UZH Zurich, CH
17:00 – 17:30	Marek Potemski, CNRS Grenoble, FR Phonon and electronic magneto-Raman scattering from the surface of graphite
17:30 – 17:50	Milan Orlita, CNRS Grenoble, FR Carrier scattering from dynamical magneto-conductivity in quasi-neutral epitaxial graphene
17:50 – 18:25	Marcos Pimenta , <i>Universidade Federal de Minas Gerais</i> , BR Characterizing devices and twisted graphene layers by resonance Raman spectroscopy
19:00 – 19:15	Closing
19:30	Get together Drink and Conference Dinner
Friday 29 April	
Breakfast and depar	ture at 9:00
List of accepted po	esters
Poster Session I – I	Monday 25 April, 20:00 – 22:00
1. Albert Guillaume	Conductance fluctuations in Superconductor/Graphene/Superconductor junctions
2. Bergvall Anders	Spectral Footprints of Impurity Scattering and Edge Disorder in Graphene Nanoribbons
3. Blake Peter	Hunting for Monolayer Boron Nitride: Optical and Raman Signatures
4. Bokdam Menno	Electrostatic doping of graphene on an ultrathin h-BN dielectric
5. Bukhvalov Danil	Realistic modeling of the establishment of sp-magnetism in graphene
6. Calizo Irene	Cutting of graphene by metallic nanoparticles
7. Carmier Pierre	Semiclassical magnetotransport in graphene n-p junctions

8. Chaves Andrey	Substrate-induced breaking of sublattice symmetry in graphene: beyond the gap
9. Choi Eunjip	Origin of substrate-dependent mobility of graphene: infrared study
10.Chshiev Mairbek	Shape Induced Magnetism in Graphene Nanomesh
11.Covaci Lucian	Superconducting proximity effect in strained graphene
12.Crassee Iris	Multi-component magneto-optical conductivity of graphene on SiC
13.Dora Balazs	Non-equilibrium transport of Dirac electrons
14.Dröscher Susanne	Transport in single and bilayer graphene nano ribbons
15.Echtermeyer Tim	Photodetection in Graphene enhanced by Plasmonic Nanostructures
16.Efetov Dmitri	Transport properties of single and bilayer graphene samples at extremely high carrier densities
17.Fay Aurélien	Electron-electron and electron-phonon interactions in graphene
18.Freitag Frank	Interaction induced gap in high-mobility suspended bilayer graphene
19.Greber Thomas	Corrugated sp2 hybridized layers: Templates for molecules
20.Hale Peter	Hot phonon decay in supported and suspended graphene
21.Hamamoto Yuji	Electron correlation and chiral symmetry in half-filled graphene in magnetic fields
22.He Dawei	Preparation of Large Scale Transparent Graphene Film via Vertical Growth Method
23.Hertel Stefan	Bottom-gated Epitaxial Graphene on SiC (0001)
24.Hiebel Fanny	How graphene on the C face of SiC compares to pristine graphene
25.Horsell David	Universal conductance fluctuations in graphene
26.Jalil Rashid	Quantum Capacitance in Graphene
27.Jobst Johannes	Transport and Magnetotransport in Epitaxial and Quasi Free-Standing Graphene
28.Kailasvuori Janik	Dirac electrons putting spin-coherent Boltzmann equations and their derivations to the test
29.Koch Roland Joachim	Non-destructive determination of charge carrier density and mobility of graphene and quasi-free standing graphene on SiC(0001)
30.Kopylov Sergey	Charge transfer between epitaxial graphene and silicon carbide
31.Krauss Benjamin	Raman Scattering at Pure Graphene Zigzag Edges

32	.Kravets Vasyl	Graphene based active plasmonic metamaterials	
33	.Kubatkin Sergey	Non-Volatile Photochemical Gating of an Epitaxial Graphene/Polymer Heterostructure [1]	
Po	Poster Session II – Wednesday 27 March – 20:00 – 22:00		
1.	La Magna Antonino	Theoretical predictions of the electronic transport properties of common defects in graphene nanoribbons	
2.	Lara-Avila Samuel Alejandro	Weak Localization in Epitaxial Graphene grown on Silicon Carbide	
3.	Liebmann Marcus	Confined and edge states on graphene nanoislands probed by scanning tunneling spectroscopy	
4.	Linden Steffen	Studies on electronic structures of orientated graphene nanoribbons	
5.	Lofwander Tomas	Graphene Nanogap for Coherent Molecular Electronics	
6.	Maassen Thomas	Spin transport in single and few layer graphene	
7.	Min Hongki	Chirality-dependent phonon-limited resistivity in graphenes	
8.	Osada Toshihito	Quantum Hall Transport in Monolayer-Bilayer Graphene heterojunction	
9.	Popa Daniel	Ultrafast, Tuneable and High-pulse-energy Lasers Enabled by Graphene Saturable Absorbers	
10	.Rappoport Tatiana	Gap opening in graphene by randomly distribued magnetic moments	
11	.Raveendran Nair Rahul	Chemical modification of graphene: Novel two-dimensional crystals	
12.	Ruffieux Pascal	On-surface synthesis and characterization of graphene nanostructures	
13.	Schmidt Hennrik	Transport properties of twisted monolayer systems	
14.	Sensarma Rajdeep	Dynamic Screening, Collective modes and Single Particle Spectral Function in Bilayer Graphene.	
15.	Sepioni Margherita	Magnetism in higly oriented pyrolytic graphite and graphene	
16	.Shizuya Ken-Ichi	tba	
17.	Stoehr Rainer	White-light luminescence from optically excited graphene	
18.	Strupinski Wlodek	Graphene Grown on SiC: Chemical Vapor Deposition vs Sublimation	
19.	Suemitsu Maki	Formation of epitaxial graphene on silicon substrates and control of their stacking	

		properties
20.	Tomori Hikari	Fabrication of ballistic graphene Josephson junctions,
21.	Tzalenchuk Alexander	Robustness of the Quantum Hall Effect in Epitaxial Graphene
22.	Uchida Kazuhito	Quantum Hall Transport and Energy Gap in Partially Gated Bilayer Graphene
23.	Urich Alexander	Intrinsic response time of graphene photodetectors
24.	Van Den Berg Jasper	Spin transport in graphene on silicon carbide
25.	Virojanadara Chariya	Epitaxial graphene growth on SiC: Characterization and functionalization.
26.	Voloshina Elena	Functionalization of graphene on metals
27.	Voutilainen Juha	Energy relaxation in graphene
28.	Walter Andrew	Highly p-doped graphene obtained by fluorine intercalation
29.	Wang Yeliang	High Resolution Imaging of Molecular Orbital Structures on Graphene/metal interfaces
30.	Wasniowska Marta	Ni atoms on graphene: electronic properties and phonon excitations
31.	Winnerl Stephan	Relaxation dynamics in graphene excited in the mid and far infrared
32.	Zareyan Malek	Spin Chirality in Magnetic Graphene