



GRAPHENE FLAGSHIP

CHALMERS
UNIVERSITY OF TECHNOLOGY

GRAPHENE

23 – 27 JUNE 2014 GOTHENBURG SWEDEN



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Graphene Week 2014 organised with support from



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Monday 23 June**7:30 - 8:30 Registration****8:30 - 12:30 Morning session 1 (RunAn) Chair: V. Falko**

8:30 - 8:35	Mon-1	Jan Stake and Sergey Kubatkin	Opening
8:35 - 8:50	Mon-1.2	Mats Viberg	Welcome by Chalmers First Vice-President
8:50 - 9:05	Mon-1.5	Jari Kinaret	Welcome by the director of the Graphene Flagship
9:05 - 9:15	Mon-1.7	Wide Hogenhout	FET Flagships - A new partnering approach
9:15 - 9:50	Mon-2-inv	Andre Geim	The rise of van der Waals Heterostructures
9:50 - 10:25	Mon-3-inv	Hong Byung Hee	Industrial production of graphene films for consumer electronics

10:25 - 10:45 Coffee break**10:45 - 12:30 Morning session 2 (RunAn) Chair: J. Kinaret**

10:45 - 11:20	Mon-4-inv	Luigi Colombo	Growth of graphene and other 2D materials: challenges and opportunities
11:20 - 11:55	Mon-5-inv	Frank Koppens	2D materials for strong light-matter interaction at nanometer lengthscales and ultra-fast timescales
11:55 - 12:30	Mon-6-inv	Amaia Zurutuza	Recent advances in graphene applications

12:30 - 13:30 Lunch**13:30 - 16:50 Afternoon session A (RunAn) Chair: L. Ponomarenko**

13:30 - 13:50	Mon-a01	Geliang Yu	Hierarchy of Hofstadter states probed by capacitance spectroscopy
13:50 - 14:10	Mon-a02	Srijit Goswami	Magnetic response of ultra-clean edge-contacted graphene: transverse focussing quantum Hall effect and Klein tunnelling
14:10 - 14:30	Mon-a03	Tomoki Machida	Oscillatory magnetotransport between counter-circulating quantum-Hall edge channels in graphene p-n junctions
14:30 - 14:50	Mon-a04	Martin Drienovsky	Towards superlattices: Lateral bipolar multibarriers in graphene
14:50 - 15:10	Mon-a05	Sei Morikawa	Landau-level spectroscopy of graphene by tunneling through ultrathin hexagonal boron nitride
15:10 - 15:30	Mon-a06	Joshua Robinson	Van der Waals Heterostructures based on Epitaxial Graphene
15:30 - 15:50	Mon-a07	Jhih-Sian Tu	Resonant tunnelling in graphene - boron nitride - graphene heterostructures
15:50 - 16:10	Mon-a08	Cinzia Casiraghi	Raman fingerprint of graphene/h-BN superlattices
16:10 - 16:30	Mon-a09	Malcolm Connolly	Direct Imaging of Coherent Quantum Transport in Graphene Heterojunctions
16:30 - 16:50	Mon-a10	Anastasia Varlet	Anomalous sequence of quantum Hall liquids revealing tuneable Lifshitz transition in bilayer graphene

13:30 - 16:30 Afternoon session B (Palmstedtsalen) Chair: A. Zurutuza

13:30 - 14:10	Mon-b01-inv	Jannik Meyer	Irradiation-induced modifications and beam-driven dynamics in low dimensional materials
14:10 - 14:30	Mon-b03	Jie Sun	Chemical vapor deposition of nanocrystalline graphene directly on arbitrary high-temperature insulators
14:30 - 14:50	Mon-b04	Tom Yager	Express optical analysis of epitaxial graphene on SiC: impact of nanoscopic morphology on macroscopic quantum transport
14:50 - 15:10	Mon-b05	Jacek Baranowski	Formation mechanism and properties of graphene buffer layer on SiC(0001)

	Monday	Tuesday	Wednesday	Thursday	Friday
15:10 - 15:30	Mon-b06	Martin Kalbac	Isotopically Labeled Turbostratic and Bernal Stacked Graphene		
15:30 - 15:50	Mon-b07	Anderson Smith	Wafer Scale Transfer of Graphene for Sensors and Transistors		
15:50 - 16:10	Mon-b08	D. Kurt Gaskill	Laundering the Dirt: Novel Lithographic Process to Realize Clean Epitaxial Graphene Surfaces for Device Applications		
16:10 - 16:30	Mon-b09	Robert Weatherup	Engineering the Catalytic Growth of Graphene		
16:50 - 18:30	Coffee and poster session				
19:00 - 20:30	The City's Welcome at Börsen (City Hall), Gustaf Adolfs torg (transfer on your own, by tram, bus or walking)				

Poster session

MonP-a01	Ageeth Bol	Towards lithography-free fabrication of graphene devices			
MonP-a02	Esteban Climent-Pascual	Graphene oxide patterning and nano-graphene fabrication by electric arc lithography			
MonP-a03	Shuojin Hang	Irradiation Induced Tunnel Barrier in Graphene			
MonP-a04	Valeria Lotito	Creating large area plasmonic patterns on graphene via self-assembly and nanosphere lithography			
MonP-a05	Park Myungjin	Nanoscale Perforation of Large-Area Graphene by Arrayed Pt Nanoparticles			
MonP-a06	Endre Tóvári	Comparison of graphene nanoribbon fabrication techniques			
MonP-b01	Luca Gagnaniello	Quasi-particle interference in epitaxial graphene nanoflakes on Au(111)			
MonP-b02	Taher Amlaki	Band gaps in incommensurable graphene on hexagonal boron nitride			
MonP-b03	Luis Brey	Negative Differential Conductivity and Coherent Tunneling transport in graphene-hBN-graphene structures.			
MonP-b04	Florian Libisch	Negative Quantum Capacitance in Gated Graphene Nanodevices			
MonP-b05	Dmitry Svintsov	Electron-hole hydrodynamics and collective excitations in graphene			
MonP-b06	Jack Alexander-Webber	Two band magneto-transport in exfoliated thin films of $\text{Cu}_{0.2}\text{Bi}_2\text{Se}_3$ topological insulators			
MonP-b07	Harihar Behera	Galvano-Coriolis effect in current carrying graphene for probing the inertial and gravitational properties of Dirac fermions in graphene			
MonP-b08	Anders Bergvall	Impurity scattering and size quantization: an analytical study of current transmission in armchair graphene nanoribbons			
MonP-b09	Ulf Briskot	Collision dominated hydrodynamics in graphene			
MonP-b10	Otakar Frank	Wrinkles in graphene: morphology and Raman spectroscopy			
MonP-b11	Roland Gillen	Indirect doping effects from impurities in MoS_2/BN and $\text{MoS}_2/\text{HfO}_2$ heterostructures			
MonP-b12	Faris Kadi	Microscopic modelling of phonon-assisted intraband absorption in graphene			
MonP-b13	Tohru Kawarabayashi	Local density of states at topological defects in a Kekulé bond order in graphene			
MonP-b14	Ian Kellett	Graphene-Based Josephson Junctions with Varying Background Potential			
MonP-b15	Yevgeniy Korniyenko	Second harmonic promotion in a ballistic graphene high-frequency transistor			
MonP-b16	Niclas Lindvall	Probing vortex avalanches in niobium thin films using weak localization in graphene			
MonP-b17	Tomas Lofwander	Destroyed quantum Hall effect in graphene with grain boundaries			
MonP-b18	Ermin Malic	Microscopic view on carrier dynamics in graphene			
MonP-b19	Lachlan Marnham	Anomalous electron pairing in graphene: Cooper-like states and their trajectories			
MonP-b20	Michael Mohn	Measurement of screening in MoS_2 and graphene heterostructures by electron energy-loss spectroscopy			

	Monday	Tuesday	Wednesday	Thursday	Friday
MonP-b21	Gautam Mukhopadhyay		Strain-engineered band-gap of graphene-like GaN monolayer: Full-potential DFT Calculations		
MonP-b22	Johan Nilsson		Trapping electrons in graphene in a rotating saddle		
MonP-b23	Mika Oksanen		Ripple-induced electron-phonon supercollisions in suspended graphene		
MonP-b24	Francesco Pellegrino		Theory of integer quantum Hall polaritons in graphene		
MonP-b25	Grzegorz Rut		Quantum-limited shot noise and quantum interference in graphene based Corbino disk		
MonP-b26	Ken-Ichi Shizuya		Orbital Lamb shift in the lowest Landau level of graphene trilayers		
MonP-b27	Pauline Simonet		Graphene - GaAs hybrid nanostructures		
MonP-b28	Dmitri Smirnov		Aharonov-Bohm effect with an in-plane magnetic field		
MonP-b29	Thibault Sohier		Boltzmann transport equation made simple: electron-phonon interactions screening and the phonon-limited electrical resistivity in graphene.		
MonP-b30	Nikodem Szpak		Quantum Transport in Deformed Graphene vs Dirac Equation in Curved Space		
MonP-b31	Fedor Tkatschenko		Quantum transport simulations and Fabry-Perot interference patterns in multiple pn-junctions on graphene		
MonP-b32	Giovanni Vignale		Violation of the Wiedemann-Franz law in clean graphene layers		
MonP-b33	Paul Clark		A Graphene Electron Beamsplitter		
MonP-b34	Dean Moldovan		Atomic collapse in strained graphene		
MonP-b35	Sandra Šopić		Interplay between microscopic decoherence and superconducting proximity effect in a graphene Andreev interferometer		
MonP-b36	Edit Elisabet Helgee		Scattering of flexural acoustic phonons at graphene grain boundaries		
MonP-b37	Slavisa Milovanovic		Spectroscopy of snake states using a graphene Hall bar		
MonP-b38	Johannes Christopher Rode		Magnetotransport measurements on folded graphene layers		
MonP-b39	Arne Senftleben		Lattice dynamics of few-layer graphene observed through femtosecond electron diffraction		
MonP-b40	Marlene Adrian		Lattice dynamics in few-layer Molybdenum disulfide investigated by Ultrafast Electron Diffraction		
MonP-b41	Jian Huang		Role of disorder in temperature-dependent magneto-transport of epitaxial graphene near the Dirac point		
MonP-b42	Ming-Hao Liu		Micron-scale magnetotransport simulations for graphene suspended pn junctions: Emergence of ballistic snake states		
MonP-b43	Akihide Ichikawa		Adsorption of molecular oxygen on nitrogen-doped graphene		
MonP-b44	Holker Fehske		Dot-bound and dispersive states in graphene quantum dot superlattices		
MonP-b45	Yongjin Lee		Giant Interaction-induced Gap and electronic phases in Rhombohedral Trilayer Graphene		
MonP-b46	Mehdi Neek-Amal		Graphene over hexagonal lattice substrate		
MonP-b47	Larisa Chizhova		Graphene quantum dots with superlattice potential in the presence of magnetic field		
MonP-b48	Diana Gradinar		Moire magnifying glass for strain and dislocations in van der Waal heterostructures		
MonP-b49	Ute Kaiser		Properties of two dimensional materials obtained from experiments in a low-voltage aberration-corrected TEM		
MonP-b50	Tom Yager		Restoring charge neutrality in epitaxial graphene via aqueous-ozone processing and annealing		
MonP-b51	Juraj Feilhauer		Tailoring the properties of electronic artificial graphene		
MonP-b52	Xi Chen		Valley asymmetry and persistence of zero-energy mode in magnetic spectrum of bilayer graphene on h-BN		
MonP-b53	Marta Gryglas-Borysiewicz		Resistivity fluctuations in microhallbars on CVD QFS-bilayer graphene		
MonP-b54	Sihem Jaziri		Tunable zero-energy transmission resonances in shifted graphene bilayer		

Tuesday 24 June

8:30 - 12:30 Morning session 1 (RunAn) Chair: T. Seyller

8:30 - 9:05	Tue-1-inv	Leonid Pnomarenko	Interactions in graphene double layer structure
9:05 - 9:40	Tue-2-inv	Allan H. MacDonald	Fractional QHE in bilayer
9:40 -10:15	Tue-3-inv	Ulrich Starke	Intercalation in epitaxial graphene on SiC: from quasi-freestanding graphene to superlattices with high doping levels

10:15 - 10:45 Coffee break

10:45 - 12:30 Morning session 2 (RunAn) Chair: K. Gaskill

10:45 - 11:20	Tue-4-inv	Kostas Kostarelos	The emergence of graphene in biomedicine
11:20 - 11:55	Tue-5-inv	C.F.J. Flipse	Interface induced room temperature ferromagnetism in hydrogenated epitaxial graphene
11:55 - 12:30	Tue-6-inv	Rahul Raveendran Nair	Properties and applications of graphene-based materials

12:30 - 13:30 Lunch

13:30 - 16:30 Afternoon session A (RunAn) Chair: A. MacDonald

13:30 - 13:50	Tue-a01	Saverio Russo	Magnetic ordering in epitaxially grown trilayer graphene by FeCl₃ intercalation
13:50 - 14:10	Tue-a02	Haruyama Junji	Rare-metal Free Graphene (Nanomesh) Spintronics and Magnetism
14:10 - 14:30	Tue-a03	Stephan Roche	Enhancing Spin-Orbit Coupling in in Graphene-based Materials: Quantum Spin Hall Effect and Spin Relaxation
14:30 - 14:50	Tue-a04	Venkata Kamalakar Mutta	Tunnel Spin Injection into Graphene using Hexagonal Boron Nitride
14:50 - 15:10	Tue-a05	Hongxin Yang	Switching of Magnetocrystalline Anisotropy of a Single Layer Cobalt Film by Graphene
15:10 - 15:30	Tue-a06	Bart Van Wees	Graphene spintronics: The current experimental status
15:30 - 15:50	Tue-a07	Dominik Bischoff	Characterizing electron wave-functions in ultrashort graphene nanoribbons on hexagonal boron nitride
15:50 - 16:10	Tue-a08	Samuel Lara-Avila	Spin relaxation mechanism in graphene on SiC from weak localization correction to conductivity in in-plane magnetic field
16:10 - 16:30	Tue-a09	Peter Rickhaus	Progress in Ultraclean Suspended Graphene: Interference patterns in magnetic field and guiding in an electrostatic channel

13:30 - 16:10 Afternoon session B (Palmstedtsalen) Chair: R. R. Nair

13:30 - 13:50	Tue-b01	Matej Velicky	Electron Transfer Kinetics on Mono- and Multi-layer Graphene and Other 2-D Layered Materials
13:50 - 14:10	Tue-b02	A.T. Charlie Johnson	Scalable Production of Highly-Sensitive Nanosensors Based on Graphene Functionalized with a Designed G-Protein Coupled Receptor
14:10 - 14:30	Tue-b03	Sanna Arpiainen	Graphene Biosensor Programming by Genetically Engineered Receptor Modules
14:30 - 14:50	Tue-b04	Alexandr Talyzin	Structure of graphene oxide membranes in water ethanol and water/ethanol: X-ray diffraction and Neutron Reflectivity studies.
14:50 - 15:10	Tue-b05	Valentina Tozzini	Designing graphene for energy applications

15:10 - 15:30	Tue-b06	Craig Poland	Potential Hazards of Graphene: Physicochemical properties of nanomaterials that promote toxicity and the use of targeted characterisation in the rapid and cost-effective screening of potential hazards during R&D
15:30 - 15:50	Tue-b07	Melanie Kucki	Interactions of graphene-based materials with human epithelial cells representing most likely exposure routes
15:50 - 16:10	Tue-b08	Gregory Schneider	Tailoring the hydrophobicity of graphene for its use as nanopores for DNA translocation

16:30 - 18:30 Coffee and poster session

19:00 Opening of the Graphene Exhibit at Universeum, elective dinner, Korsvägen (transfer on your own, by tram, bus or walking)

Poster session

TueP-a01	Chuan Li	Unipolar supercurrent through graphene grafted with Pt-Porphyrins: Signature of gate voltage dependent magnetism
TueP-a02	André Dankert	MoS₂ Field Effect Transistors with Ferromagnetic Tunnel Contacts
TueP-a03	Igor Beljakov	Spin-crossover and Massive Anisotropy Switching of 5d Transition Metal Atoms on Graphene Nanoflakes
TueP-a04	Nojoon Myoung	Sensitive Modulation of Transport through Multiple Magnetic Barriers in Graphene by Local Electrochemical Doping
TueP-a05	Khosrow Shakouri	Spin configuration in modulated graphene
TueP-a06	Maria Augustyniak-Jablokow	Electron Spin Resonance of graphene. Challenges difficulties benefits
TueP-a07	Matthias Droth	Exchange coupling between localized vacancy states in graphene nanoflakes
TueP-a08	Denis Kochan	Giant spin-orbit coupling due to fluorine adatoms in graphene
TueP-a09	Peter Makk	Spin injection to graphene through layered materials
TueP-a10	Ameneh Najafi	The topography of hydrogenated epitaxial graphene and the corresponding Ferromagnetic behavior
TueP-a11	Toshihito Osada	Pseudo-Spin Dependent Interlayer Magnetotunneling in Layered Dirac Fermion Systems
TueP-a12	Diego Rabelo Da Costa	Magnetic field dependence of the energy levels in bilayer graphene nanoflakes
TueP-a13	Manuel Schmidt	The Quantum Nature of Edge Magnetism
TueP-a14	Roman Strzelczyk	Towards stable edge magnetism in graphene
TueP-a15	Jana Vejpravova	Charge and strain distribution in graphene-nanoparticle system by Raman mapping under magnetic field
TueP-a16	John Robert Wallbank	The magnetic miniband spectra of graphene with hexagonal moiré superlattices
TueP-a17	Jozef Sivek	Huge magnetic anisotropy in doped single layer Molybdenum disulfide and Fluorographene
TueP-a18	Andor Kormányos	Spin-Orbit Coupling, Quantum Dots, and Qubits in Monolayer Transition Metal Dichalcogenides
TueP-a19	Hee Chul Park	Tunable Giant Resistance in Vertical Heterojunctions Based on Ferromagnetic Graphene
TueP-b01	Omid Habibpour	Developing Graphene FETs and MMICs based on Hydrogen intercalation Graphene
TueP-b02	Stefan Hertel	Monolithic Epitaxial Graphene Electronics
TueP-b03	David Jiménez	How does graphene polycrystallinity impact on the performance of graphene based transistors ?
TueP-b04	Pawel Janusz Kowalczyk	The nanoscale characterization of resistive switching in graphene oxide systems
TueP-b05	Dong Wang	Back-gated field effect transistor of millimeter-scale graphene on dielectric substrates
TueP-b06	Jens Baringhaus	Ballistic pn-junctions in chemically gated graphene ribbons

TueP-b07	Axel Martin Eriksson	Nonresonant High Frequency Excitation of Nanomechanical Oscillators
TueP-b08	Mark Greenaway	Resonant tunneling and negative differential conductance in graphene/hBN/graphene transistors: effects of crystalline misorientation
TueP-b09	Cay-Christian Kalmbach	AC measurements of the quantum Hall resistance in epitaxial graphene
TueP-b10	Felix Lüönd	Dc and ac quantum Hall effect measurements with graphene
TueP-b11	Farmanbar Mojtaba	Tuning the Schottky barrier heights at MoS₂ metal contacts: a first-principles study
TueP-b12	Son Le	2D resistance map of graphene p-n junction in quantum Hall regime
TueP-b13	Wonjae Kim	Electrical rectification in three-terminal graphene device
TueP-b14	Miseikis Vaidotas	The applications of graphene in surface acoustic wave microfluidics
TueP-c01	Kasibhatta Kumara Ramanatha Datta	Carbon Dot Modified Graphene Oxide with Tunable Fluorescence- Advanced Carbon Nanoarchitecture for Selective Cell Labeling
TueP-c02	Jean-Nicolas Longchamp	Ultraclean freestanding graphene as substrate for electrospray deposition of biomolecules
TueP-c03	Peng Chen	Graphene Quantum Dots as the New Universal Fluorescent Probes: Synthesis and Applications
TueP-c04	Dmitry Kireev	Large array of GFETs for extracellular communication with neuronal cells
TueP-c05	Emil Bjerglund Pedersen	Electrochemical Carboxylation of Graphene to Create a Platform for Biomolecule Attachment
TueP-c06	Alice Montagner	Evaluation of graphene-based materials effects on the coccoid green alga <i>Trebouxia gelatinosa</i> Archibald
TueP-c07	Aravind Vijayaraghavan	Covalent and non-covalent multiplex bio-functionalisation of graphene through dip-pen nanolithography
TueP-c08	Mikael Syväjärvi	Towards electrodes and biosensors using graphene on silicon carbide
TueP-c09	Michael Spencer	Enhanced Sensitivity of Fabricated Graphene Electrochemical Sensor Electrode Arrays with Optimized Geometry
TueP-d01	Artjom Berholts	Light-activated gas sensitivity of graphene in ambient conditions
TueP-d02	Karim Elgammal	Density Functional Theory study of Graphene based Humidity Sensing
TueP-d03	Igor Lezhokin	Highly sensitive quasi freestanding epitaxial graphene gas sensor on 6H-SiC
TueP-d04	Christin Edblom	Diffusion induced dissipation in nanocarbon mechanical resonators

Wednesday 25 June

8:30 - 12:30 Morning session 1 (RunAn) Chair: A. Ferrari

8:30 - 9:05	Wed-1-inv	Tony Heinz	Terahertz spectroscopy of graphene
9:05 - 9:40	Wed-2-inv	Alexey Kuzmenko	Influence of nanoscale defects on optical and plasmonic properties of graphene
9:40 - 10:15	Wed-3-inv	Alexander Balandin	Low-Frequency Current Fluctuations in Graphene: 1/f Noise and Beyond

10:15 - 10:45 Coffee break

10:45 - 12:30 Morning session 2 (RunAn) Chair: F. Koppens

10:45 - 11:20	Wed-4-inv	Xiaodong Xu	Optoelectronics of 2D transition metal dichalcogenides
11:20 - 11:55	Wed-5-inv	Tony A Low	Light-matter interactions in 2D materials
11:55 - 12:30	Wed-6-inv	Ado Jorio	Advances in the raman spectroscopy of graphene related systems

12:30 - 13:30 Lunch

13:30 - 16:30 Afternoon session A (RunAn) Chair: A. Tzalenchuk

13:30 - 13:50	Wed-a01	Vincent Bouchiat	Collapse of superconductivity in a hybrid tin-graphene Josephson junction array
13:50 - 14:10	Wed-a02	Wilfrid Poirier	Quantum Hall effect in polycrystalline CVD graphene: unveiling unusual dissipation mechanism
14:10 - 14:30	Wed-a03	Zhenbing Tan	Cooper pair splitting realised in graphene quantum dots
14:30 - 14:50	Wed-a04	Pertti Hakonen	Graphene optomechanics realized at microwave frequencies
14:50 - 15:10	Wed-a05	Haitao Liu	On the Intrinsic Wettability of Graphene
15:10 - 15:30	Wed-a06	Janina Maultzsch	Full two-dimensional calculation of the double-resonant 2D-mode Raman scattering cross-section in bilayer graphene
15:30 - 15:50	Wed-a07	Georgia Tsoukleri	Few layer graphene flakes under efficient mechanical loading: experiment and modeling
15:50 - 16:10	Wed-a08	Nedjma Bendiab	Strain superlattices and macroscale suspension of Graphene induced by corrugated substrates
16:10 - 16:30	Wed-a09	Matteo Bruna	Quantification of defects in doped graphene using Raman spectroscopy

13:30 - 16:50 Afternoon session B (Palmstedtsalen) Chair: A. Balandin

13:30 - 13:50	Wed-b01	Erica Guerriero	Integrated graphene high-gain voltage amplifiers and high-frequency ring oscillators
13:50 - 14:10	Wed-b02	Michael Andersson	Comparison of carrier scattering mechanisms in chemical vapor deposited graphene on fused silica and strontium titanite substrates
14:10 - 14:30	Wed-b03	Songlin Li	Carrier Injection and Transport in Two-Dimensional MoS₂ Layers
14:30 - 14:50	Wed-b04	Lili Yu	High-performance WSe₂ CMOS devices and integrated circuits
14:50 - 15:10	Wed-b05	David Horsell	Electron cooling mechanisms in graphene
15:10 - 15:30	Wed-b06	Ilya Goykhman	Plasmonic silicon-graphene Schottky photodetector for on-chip applications in the telecom spectral band.
15:30 - 15:50	Wed-b07	Valentin J Wittwer	Broadband Graphene Saturable Absorber Mirrors for VECSEL Mode-locking
15:50 - 16:10	Wed-b08	Emre Ozan Polat	Broadband optical modulators based on graphene supercapacitors

16:10 - 16:30	Wed-b09	Peter Qiang Liu	Large-area THz graphene plasmonic structures with enhanced structural robustness
16:30 - 16:50	Wed-b10	Sanghyun Jo	Opto-electronic Properties of Mono- and Bi-layer WS₂
17:10 - 17:40	Topical session: where to publish research on graphene and other 2d materials? (RunAn) Chair: L. Colombo		
17:00 - 17:15	Wed-c1	Samindranath Mitra	Graphene in Physical Review Letters
17:15 - 17:30	Wed-c2	Tim Smith	Introducing 2D Materials - a new multidisciplinary journal devoted to graphene and related two-dimensional materials
17:30 - 18:00	Wed-c3	Elisa De Ranieri, Luke Fleet, Andrea Taroni	Publishing graphene papers in Nature journals

16:50 - 18:30 Coffee and poster session

Free evening

Poster session

WedP-a01	Philip Willke	Electronic and Transport Properties of Epitaxial Graphene on the Atomic Scale
WedP-a02	Tymoteusz Ciuk	Transport Properties of Epitaxial and CVD Graphene on SiC
WedP-a03	Rand Elmquist	Low-carrier-density monolayer epitaxial graphene devices on SiC
WedP-a04	Christof Neumann	Hybrid heterostructures of zero-dimensional and two-dimensional carbon
WedP-a05	Simon J. Altenburg	STM Characterization and Functionalization of Graphene on Metal surfaces
WedP-a06	Hennrik Schmidt	Transport properties of thin MoS₂ in the high conduction regime
WedP-a07	Arseniy Lartsev	Tuning carrier density in epitaxial graphene on SiC across charge neutrality point using corona discharge
WedP-a08	Ana Martin Recio	Unexpected Moire Patterns on Graphene on Rh(111) grown under Ultra-High Vacuum Conditions
WedP-a09	Barbara Pacakova	AFM Studies on Wrinkled Graphene: How do the Nanoparticles Influence the Layer Topography
WedP-a10	Ji-Yong Park	Investigating changes in local electrical conductance of individual graphene oxide sheets with reduction
WedP-a11	Michal Woluntarski	Various methods of deposition graphene oxide flakes for SEM imaging.
WedP-a12	Chariya Virojanadara	Band structure and stacking of multilayer C-face graphene investigated using nano-ARPES
WedP-a13	Filippo Giannazzo	Electrical properties of hydrogen intercalated epitaxial graphene/SiC interface investigated by nanoscale current mapping
WedP-a14	Andrey Turchanin	All-carbon vertical van der Waals heterostructures: Non-destructive functionalization of graphene for electronic applications
WedP-a15	Santiago Jose Cartamil-Bueno	Permeability of Suspended 2D Material Membranes
WedP-a16	Osvaldo Del Pozo-Zamudio	Optical investigation of stability of InSe and GaSe thin films
WedP-a17	Engin Durgun	Monolayers of MoS₂ and WS₂ as Oxidation Protective Nanocoating Materials
WedP-a18	Johannes Jobst	Utilizing Graphene's Quantum Interference in LEEM to Probe Local Surface Potentials
WedP-a19	Felix Kampmann	Disorder and doping at the edges of graphene nanoribbons
WedP-a20	Hu Li	Atomic structure of defective graphene under Ga ion irradiation at low and high doses
WedP-a21	Christos Melios	Effects of H₂-intercalation on surface potential of epitaxial graphene
WedP-a22	Daniel Midtvedt	Atomically thin phononic crystals from graphene membranes

WedP-a23	Christoph Neumann	Magneto Raman microscopy on monolayer and bilayer graphene-hBN heterostructures
WedP-a24	Vishal Panchal	Visualization of edge effects in graphene nanodevices
WedP-a25	Amaia Pesquera	Transmission electron microscopy for imaging graphene features
WedP-a26	Mariusz Zdrojek	Nonlinear thermal conductivity of a supported MoS₂ monolayer
WedP-a27	Wataru Norimatsu	Interface modification by nitrogen in epitaxial graphene on SiC
WedP-a28	Chao Xia	Thermal stability of metal functionalized graphene grown on Si-face SiC
WedP-a29	Deniz Cakir	Doping of Rhenium Disulfide monolayers: A systematic first principles study
WedP-a30	Alexandre Merkulov	Extremely Low Impact Energy SIMS characterization of graphene
WedP-a31	Pawel Dabrowski	Properties of Nitrogen doped Graphene
WedP-a32	Hasan Sahin	Rhenium Disulphide: Bulk as if Monolayers
WedP-a33	László Péter Biró	Scanning Probe Microscopy Characterization of CVD Graphene and Nanolithography with Crystallographic Orientation Control
WedP-a34	Rositsa Yakimova	Sensitivity of epitaxial graphene to atmospheric conditions
WedP-a35	Léonard Schué	Structural and spectroscopic properties of h-BN layers
WedP-a36	Lionel Dubois	Taming a promising graphene like catalytic material: Molecular Approach to Graphitic Carbon Nitride (g-CN)
WedP-a37	Tauno Kahro	Breathing modes in Raman of CVD grown twisted bilayer graphene
WedP-b01	Tim Verhagen	Low temperature Raman-spectroscopy of isotopically labelled bilayer graphene
WedP-b02	Johannes Binder	Simultaneous Raman and electrical / electrochemical measurements of an aqueous solution gated graphene field effect transistor
WedP-b03	Katarzyna Golasa	The effect of disorder on the Raman scattering in MoS₂
WedP-b04	Mats Granath	Plasmons and plasmarons in bilayer graphene: results from RPA and self-consistent GW calculations
WedP-b05	Kacper Grodecki	Resonant Raman scattering on buffer layer in 4H-SiC(0001)
WedP-b06	Felix Herziger	Double-resonant LA phonon scattering in graphene and carbon nanotubes: dependence on laser excitation energy layer number and tube diameter
WedP-b07	Silvia Milana	Raman Spectroscopy of Layer Breathing Modes of multilayer graphene
WedP-b08	Emanuele Poliani	Nanoscale Raman imaging of a single graphene fin
WedP-b09	Ben Van Duppen	Polarization function and plasmarons in ABA and ABC stacked trilayer graphene
WedP-b10	Tobias Wenger	Electromagnetic response of graphene
WedP-b11	Stephan Winnerl	Anisotropy of absorption bleaching and carrier relaxation in graphene
WedP-b12	August Yurgens	Variation of the Dirac point in graphene caused by UV light
WedP-b13	Francisco Bezares	Chemical Functionalization of Graphene for Plasmonic Applications
WedP-b14	Vanya Darakchieva	Infrared Optical Hall effect in epitaxial graphene
WedP-b15	Achim Woessner	Near-field imaging of plasmons in graphene
WedP-b16	Wissem Zouaghi	Terahertz metamaterial behavior of patterned single-layer graphene

Thursday 26 June

8:30 - 12:30 Morning session 1 (RunAn) Chair: P. Hakonen

8:30 - 9:05	Thu-1-inv	Di Wei	Application of graphene in electrochemical energy storage devices
9:05 - 9:40	Thu-2-inv	Peter Steeneken	Graphene sensors for semiconductor industry
9:40 -10:15	Thu-3-inv	Georg Duesberg	Functional electrodes from 2D materials

10:15 - 10:45 Coffee break

10:45 - 12:30 Morning session 2 (RunAn) Chair: R. Yakimova

10:45 - 11:20	Thu-4-inv	Thomas Seyller	Phonons in epitaxial graphene on SiC
11:20 - 11:55	Thu-5-inv	Christos Dimitrakopoulos	Wafer-scale epitaxial graphene on SiC-synthesis devices and transfer
11:55 - 12:30	Thu-6-inv	Lain-Jong Li	Growth of transition metal dichalcogenide monolayers with chemical vapor deposition

12:30 - 13:30 Lunch

13:30 - 16:50 Afternoon session A (RunAn) Chair: E. Quesnel

13:30 - 13:50	Thu-a01	Andreas Pospischil	Photovoltaic Energy Conversion and Electrically Driven Light Emission in a WSe₂ Monolayer p-n Junction
13:50 - 14:10	Thu-a02	Jacob Tse-Wei Wang	All Low-Temperature Processed Thin Film Perovskite Solar Cells Based on Graphene/TiO₂ Nanocomposites as Electron Collection Layers
14:10 - 14:30	Thu-a03	Marco Mercurio Furchi	Photovoltaic effect in an atomically thin p-n junction
14:30 - 14:50	Thu-a04	Torge Mashoff	Functionalized graphene as a system for hydrogen storage
14:50 - 15:10	Thu-a05	Jan Bitenc	Graphene materials as components of advanced battery systems
15:10 - 15:30	Thu-a06	Charles Agnes	Graphene oxide and derivatives as materials for electrochemical storage purposes
15:30 - 15:50	Thu-a07	Joon Young Kwak	Study of Electrical and Optical Characteristics of Multilayer MoS₂-Graphene Hetero-Junction
15:50 - 16:10	Thu-a08	Keisuke Takahashi	Theoretical and experimental stabilization of hydrogenated iron clusters over the graphene
16:10 - 16:30	Thu-a09	Pablo Alonso-González	Shaping propagating graphene plasmons with tailored metal antennas
16:30 - 16:50	Thu-a10	Michael Krueger	Hybrid nanocomposites of quantum dots and functionalized graphenes for optoelectronic applications

13:30 - 16:50 Afternoon session B (Palmstedtsalen) Chair: V. Palermo

13:30 - 13:50	Thu-b01	Keith Paton	An Industrially Relevant Route to High Quality Graphene
13:50 - 14:10	Thu-b02	Rene Hoffmann	Electrochemical production of graphene and graphane flakes
14:10 - 14:30	Thu-b03	Rónán Smith	Using Edge and Confinement Effects for in-situ Determination of Size and Thickness of Liquid-Exfoliated Nanosheets
14:30 - 14:50	Thu-b04	Alba Centeno	Graphene for tough and electroconductive alumina ceramics
14:50 - 15:10	Thu-b05	Katarzyna Juda	Graphene synthesis at a large scale in a novel atmospheric pressure microwave plasma reactor
15:10 - 15:30	Thu-b06	Sebastian Heeg	Strained graphene as a probe for plasmon-enhanced Raman scattering by gold nanostructures
15:30 - 15:50	Thu-b07	Jun Li	Tuning the electronic properties of graphene by molecular self-assembly

15:50 - 16:10	Thu-b08	Norbert Fabricius	Standardization of Nano-enabled Electrotechnical Products: Perspectives for the Graphene Flagship
16:10 - 16:30	Thu-b09	Gil Alberto Batista Gonçalves	Graphene Oxide: An emerging nanomaterial for cancer therapy
16:30 - 16:50	Thu-b10	Maciej Rogala	Graphene oxide overprints for flexible and transparent electronics

16:50 - 18:30 Coffee and poster session

19:00 Conference Dinner, Restaurant Kajskjul 8, Packhusplatsen 11 (transfer on your own, by tram, bus or walking)

Poster session

ThuP-a01	Wei-Hua Wang	Biologically inspired graphene-chlorophyll phototransistors with high gain
ThuP-a02	Roland Jago	Light emission and carrier dynamics of graphene in an optical cavity
ThuP-a03	Zhe Jiang	Power scaling graphene mode-locked fiber laser
ThuP-a04	Shisheng Lin	Graphene: Highly increasing the lifetime of light-emitting-diodes
ThuP-a05	Ivan Nikitskiy	Hybrid graphene-quantum dot phototransistors for IR-imaging applications
ThuP-a06	Yuki Okigawa	Fabrication of polymer organic electro-luminescence devices using graphene films synthesized by plasma CVD
ThuP-a07	Daniel Popa	Few-cycle pulses with graphene lasers
ThuP-a08	Minjung Kim	Gate dependence of photocurrent at a junction between ABA and ABC stacking in tri-layer graphene
ThuP-a09	Silvio Morgenstern	Laser-induced heating of nano-crystalline graphene monitored by Ultra-fast Electron Diffraction
ThuP-a10	Marcin Mucha-Kruczynski	Optical absorption of monolayer and bilayer graphene on hBN
ThuP-a11	Egon Pavlica	Time-of-flight photoconductivity of polymer:graphene blends
ThuP-a12	Nils Peter Scheuschner	Photoluminescence of freestanding single and few-layer MoS₂
ThuP-a13	Stefan Schwarz	Optics of two-dimensional chalcogenide films in tunable photonic micro-cavities
ThuP-a14	Meinrad Sidler	Single Photon Emitters in Monolayer WSe₂
ThuP-a15	Andrea Tomadin	Plasma-wave photodetection in dual-gated graphene bilayers
ThuP-a16	Maxim Trushin	On the ultrafast optical pump-probe measurements in graphene at low pump fluence
ThuP-a17	Mark Lundeberg	Mid-infrared photocurrent in graphene
ThuP-a18	Jaroslav Sotor	Passive synchronization of mode-locked thulium- and erbium-doped fiber lasers by common graphene saturable absorber
ThuP-a19	Mathieu Massicotte	The effect of photon energy on hot-carrier mediated photoresponse in graphene
ThuP-b01	Chaojie Cui	Highly electroconductive mesoporous graphene nanofibers: synthesis and capacitance performance at 4V
ThuP-b02	Dimitrios Konios	Graphene-based buffer layers for improved Bulk Heterojunction Solar Cell
ThuP-b03	Zhen Yuan Xia	3D Fe₂O₃-graphene foam as supercapacitor electrode via electrochemical exfoliated graphene precursor
ThuP-c01	Jason Perman	Supramolecular Pillaring of Graphene and Graphene Oxide
ThuP-c02	Florence Duclairoir	Epitaxial graphene growth and investigations around its non-covalent or covalent functionalization
ThuP-c03	Masatou Ishihara	Surface modification of graphene films and its application for transparent conductive films
ThuP-c04	Mattias Kruskopf	Conditioning of 6H-SiC(0001) surfaces by argon annealing for epitaxial graphene growth

ThuP-c05	Choi Kyoungjun	Selective Growth of Graphene by Chemical Vapor Deposition of Acetylene on Binary Metal Alloy
ThuP-c06	Iwona Pasternak	Frame method of graphene films transferring
ThuP-c07	Igor Wlasny	The limitations of graphene coatings on single- and polycrystalline copper
ThuP-c08	Robert Jan Buda	Surface characterization and electronic properties of CVD graphene on SiC
ThuP-c09	Aneta Drabinska	Reducing inelastic scattering in N-doped CVD graphene on SiC (0001) by hydrogen intercalation
ThuP-c10	Ivan G. Ivanov	Characterization of as-grown and H-intercalated graphene on SiC by combined Raman and reflectance mapping
ThuP-c11	Carlo Orofeo	Synthesis of two-dimensional MS₂ (M=MoW) and their heterostructure by sulfurization of thin metal films
ThuP-c12	Grigory Skoblin	A responsive hot-wall CVD system made of two graphitic heaters inside a cold-wall chamber
ThuP-c13	Martina Wanke	The Influence of Monosilane on Epitaxial Graphene Growth in Ar atmosphere
ThuP-c14	Magdalena Aksienionek	Combined liquid phase and thermal exfoliation of graphite to graphene ribbons
ThuP-c15	Britta Andres	Characterization of nanographite and graphene produced in a high-pressure homogenizer
ThuP-c16	Nicklas Blomquist	Large-scale production of graphene
ThuP-c17	Adrien Michon	Transport properties and quantum Hall effect of graphene films grown by CVD on SiC(0001) with in-situ hydrogenation
ThuP-c18	J. Marcelo Lopes	Growth of high-quality graphene by molecular beam epitaxy on epitaxial Ni/MgO(111) substrates
ThuP-c19	Luca Croin	Insights on the mechanism of Remote Catalysis of Hydrocarbons for Graphene CVD
ThuP-c20	Jawad Ul Hassan	Quasi-free-standing monolayer and bilayer graphene growth on homoepitaxial on-axis 4H-SiC(0001) layers
ThuP-d01	Fabian Beckert	Tailor-made functionalized graphene for carbon/polymer nanocomposites
ThuP-d02	Ismail Hijazi	Modified graphene for nanocomposite applications
ThuP-d03	Angelos Kyrilidis	Engineering Functional Carbon Additives For Polymer Composites And Other Applications: From Carbon Black To Graphene Based Materials
ThuP-d04	Anna Pajor-Swierzy	The electrocatalytic properties of the multilayer polyelectrolyte films formed with Prussian Blue nanoparticles and reduced graphene oxide
ThuP-d05	Johan Liu	Development and characterization of graphene-enhanced thermal conductive adhesives
ThuP-d06	Matthew Thornton	PolyGraph: Large scale in-situ production of graphene for the multifunctionalisation of thermosetting resins
ThuP-d07	Alexander Balandin	Graphene Applications in Thermal Interface Materials for Heat Removal from Advanced Electronics
ThuP-d08	John Parthenios	Raman spectroscopy probes frictional properties of graphene/ polymer interface

Friday 27 June

8:30 - 12:30 Morning session 1 (RunAn) Chair: B. Beyer

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|--------------|-----------|------------------|--|
| 8:30 - 9:05 | Fri-1-inv | Rolf Mülhaupt | Scale-up of graphite oxide synthesis for binder-free graphene dispersions nanocomposites and 3D printing of catalysts and supercaps |
| 9:05 - 9:40 | Fri-2-inv | Xinliang Feng | Atomically precise synthesis of graphenes: a bottom up approach |
| 9:40 - 10:15 | Fri-3-inv | Vincenzo Palermo | Fragmentation and exfoliation of low-dimensional materials: a statistical approach |

10:15 - 10:45 Coffee break

10:45 - 12:30 Morning session 2 (RunAn) Chair: M. G. Hernández

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|---------------|-----------|----------------------------------|--|
| 10:45 - 11:20 | Fri-4-inv | Maurizio Prato | Synthesis and applications of Functionalized graphene |
| 11:20 - 11:55 | Fri-5-inv | Debdeep Jena | Electronic devices enabled by graphene |
| 11:55 - 12:25 | Fri-5.5 | Jan Stake and
Sergey Kubatkin | Closing Graphene Week 2014 |
| 12:25 - 12:30 | Fri-6 | | Announcement of Graphene Week 2015 |

12:30 - 13:30 Lunch