

School and Conference Timetable

Saturday		Sunday		Monday		Tuesday		Wednesday	
8:00	Breakfast	8:00	Breakfast	8:00	Breakfast	8:00	Breakfast	8:00	Breakfast
9:00	T Brandes	9:00	Y Blanter	9:00	Y Tserkovnyak	9:00	H Courtois	9:00	J Chalker
				9:30	K Arutyunov	9:30	R Mélin	9:30	S Roddaro
10:00	Coffee	10:00	Coffee	10:00	J Smet	9:50	I Sosnin	9:50	İ Adagideli
10:30	Y Blanter	10:30	W Belzig	10:10	D Sánchez	10:10	B Nikolić	10:30	Coffee
				10:30	Coffee	10:30	Coffee	10:30	Coffee
11:00		11:00		11:00	A Brataas	11:00	R Aguado	11:00	S Dorozhkin
11:30	Break	11:30	Break	11:30	C Marrows	11:30	Y Nazarov	11:30	M Potemski
12:00	W Belzig	11:45	E Sukhorukov	12:00	V Dupuis	12:00	P Delsing	12:00	M Grayson
				12:30 -12:50	M Zareyan	12:30 -12:50	J Cserti	12:30	B Altshuler
13:00	Lunch	12:45	Lunch	13:00	Lunch	13:00	Lunch	13:00	Lunch
		14:00	R Leturcq					14:00	Bus departure
14:30	T Brandes	14:30	F Hekking	14:30	M Blencowe	14:30	P Michler		
		15:00	L DiCarlo	15:00	A Donarini	15:00	C Tejedor		
15:30	Coffee	15:20	A Braggio	15:20	D Rodrigues	15:30	A Vagov		
		15:40	T Novotny	15:40	A Bykov				
16:00	E Sukhorukov	16:00	Coffee	16:00	Coffee	16:00	Coffee		
		16:30	T Brandes	16:30	T Ando	16:30	P Kim		
17:00	Break	17:00	G Falci	17:00	F Guinea	17:00	E McCann		
17:30	Discussion	17:30	C Bruder	17:30	A Geim	17:30	P Esquinazi		
		18:00 -18:20	A Morpurgo	18:00	B Simons	18:00 -18:20	L Brey		
		18:30	Posters up	18:30 -19:30	Poster session	18:30 -19:30	Poster session		
19:30	Dinner	19:30	Welcome Party	20:00	Dinner	20:00	Dinner		

Program – School on Counting Statistics

Saturday 7th January

8:00-8:45 **Breakfast (Langdales Restaurant)**

Conference Centre

MR1 Morning Session (Chair: Henning Schomerus)

- 9:00-10:00 Tobias Brandes
Photoelectron counting in quantum optics I
- 10:00-10:30 Coffee
- 10:30-11:30 Yaroslav Blanter
Shot noise in nanostructures I
- 11:30-12:00 Break
- 12:00-13:00 Wolfgang Belzig
Full counting statistics in mesoscopic electronics I
- 13:00-14:30 **Lunch (Foyer)**

MR1 Afternoon Session (Chair: Edward McCann)

- 14:30-15:30 Tobias Brandes
Photoelectron counting in quantum optics II
- 15:30-16:00 Coffee
- 16:00-17:00 Eugene Sukhorukov
Stochastic path integral approach to counting statistics I
- 17:30-19:00 Discussion
- 19:30-21:00 **Dinner (Langdales Restaurant)**

Sunday 8th January

8:00-8:45 **Breakfast (Langdales Restaurant)**

Conference Centre

MR1 Morning Session (Chair: Ramón Aguado)

- 9:00-10:00 Yaroslav Blanter
Shot noise in nanostructures II
- 10:00-10:30 Coffee
- 10:30-11:30 Wolfgang Belzig
Full counting statistics in mesoscopic electronics II
- 11:30-11:45 Break
- 11:45-12:45 Eugene Sukhorukov
Stochastic path integral approach to counting statistics II
- 12:45-14:00 **Lunch (Foyer)**

Program – International Conference Nanoelectronics 2006

Sunday 8th January

Conference Centre

MR1 Noise and Counting Statistics I (Chair: Wolfgang Belzig)

- 14:00-14:30 Renaud Leturcq
Counting statistics of single electron transport in a quantum dot
- 14:30-15:00 Frank Hekking
Finite frequency quantum noise in an interacting mesoscopic conductor
- 15:00-15:20 Leonardo DiCarlo
Shot Noise of a Quantum Point Contact in a Magnetic Field
- 15:20-15:40 Alessandro Braggio
*Full Counting Statistics & Non-Markovian Effect
in Strongly Interacting Systems*
- 15:40-16:00 Tomas Novotny
Charge transport statistics of quantum shuttles
- 16:00-16:30 **Coffee (Foyer)**

MR1 Noise and Counting Statistics II (Chair: Elisabetta Paladino)

- 16:30-17:00 Tobias Brandes
Coherence and noise in transport through coupled quantum dots
- 17:00-17:30 Guiseppe Falci
Adiabatic passage in superconducting nanocircuits
- 17:30-18:00 Christoph Bruder
Current cross-correlations in mesoscopic devices
- 18:00-18:20 Alberto Morpurgo
*Non-local Andreev reflection: experimental observation and
relevance for entangler devices*
- 18:30-19:30 **Posters up (MR1)**

Barker House Farm

- 19:30-21:30 **Dinner/Welcome party with barrels of local beer**

Monday 9th January

8:00-8:45 **Breakfast (Langdales Restaurant)**

Conference Centre

MR2 Quantum Transport I (Chair: John Chalker)

- 9:00-9:30 Yaroslav Tserkovnyak
Momentum-resolved tunneling into a short cleaved-edge wire
- 9:30-10:00 Konstantin Arutyunov
Quantum size phenomena in ultra-narrow 1D nanowires
- 10:00-10:30 Jurgen Smet
Polarization dependence and local probe studies of the microwave induced zero resistance in the two dimensional electron system
- 10:30-11:00 **Coffee (Foyer)**

MR2 Hybrid Structures I (Chair: Gerrit Bauer)

- 11:00-11:30 Arne Brataas
Magnetoelectronic Circuits: Torque, Pumping, and Noise
- 11:30-12:00 Chris Marrows
Spin polarisation at finite temperature
- 12:00-12:30 Véronique Dupuis
Single magnetic clusters embedded in matrix
- 12:30-12:50 Malek Zareyan
Shot noise in magnetoelectronic structures
- 13:00-14:30 **Lunch (Foyer)**

MR2 Quantum Dynamics (Chair: Christoph Bruder)

- 14:30-15:00 Miles Blencowe
Cooper-Pair Molasses: Cooling a Nanomechanical Resonator with Quantum Back-Action
- 15:00-15:20 Andrea Donarini
Electromechanical properties of a biphenyl transistor
- 15:20-15:40 Denzil Rodrigues
The SET Resonator: Quantum Master Equations
- 15:40-16:00 Alexey Bykov
Effect of DC and AC excitations on the magnetoresistance in high-density high-mobility GaAs quantum well systems
- 16:00-16:30 **Coffee (Foyer)**

MR2 Graphene and Graphite I (Chair: Pablo Esquinazi)

- 16:30-17:00 Tsuneya Ando
Exotic transport properties of two-dimensional graphite
- 17:00-17:30 Francisco Guinea
Interaction effects, disorder, and transport in graphene layers
- 17:30-18:00 Andre Geim
QED in a Pencil Trace
- 18:00-18:30 Ben Simons
Electronic Structure of the Superconducting Graphite Intercalates
- 18:30-19:30 **Poster session I (MR1)**
- 20:00-21:30 **Dinner (Langdales Restaurant)**

Tuesday 10th January

8:00-8:45 **Breakfast (Langdales Restaurant)**

Conference Centre

MR2 Hybrid Structures II (Chair: Alberto Morpurgo)

- 9:00-9:30 Hervé Courtois
Local spectroscopy of superconducting hybrid nanostructures
- 9:30-9:50 Regis Mélin
Non local transport at FS and NS double interfaces
- 9:50-10:10 Igor Sosnin
Superconducting proximity effect in conical ferromagnets
- 10:10-10:30 David Sánchez
Magnetic-field asymmetry in nonlinear mesoscopic transport
- 10:30-11:00 **Coffee (Foyer)**

MR2 Quantum Transport II (Chair: Angus McKinnon)

- 11:00-11:30 Ramón Aguado
SU(4) Kondo effect in Carbon Nanotubes
- 11:30-12:00 Yuli Nazarov
 G_q corrections in circuit theory of Quantum Transport
- 12:00-12:30 Per Delsing
Current measurement by counting of single electrons
- 12:30-12:50 József Cserti
Rashba Billiards
- 13:00-14:30 **Lunch (Foyer)**

MR2 Mesoscopic Quantum Optics (Chair: Tobias Brandes)

- 14:30-15:00 Peter Michler
Photon correlation measurements on semiconductor nanostructures
- 15:00-15:30 Carlos Tejedor
Quantum optics with quantum dots in microcavities: photon pairs emission
- 15:30-16:00 Alexei Vagov
Ultra-fast dynamics of optically excited quantum dots
- 16:00-16:30 **Coffee (Foyer)**

MR2 Graphite and Graphene II (Chair: Tsuneya Ando)

- 16:30-17:00 Philip Kim
Unusual Transport Properties in Carbon Based Low Dimensional Materials: Nanotubes and Graphene
- 17:00-17:30 Edward McCann
Landau level degeneracy and quantum Hall effect in a graphite bilayer
- 17:30-18:00 Pablo Esquinazi
Magnetic order in carbon structures
- 18:00-18:20 Luis Brey
Quantum Hall Effect and Edge States in Graphene
- 18:30-19:30 **Poster session II (MR1)**
- 20:00-21:30 **Dinner (INFOLAB café)**

Wednesday 11th January

8:00-8:45 **Breakfast (Langdales Restaurant)**

Conference Centre

MR2 Quantum Hall Effect and Transport I (Chair: Vadim Cheianov)

- 9:00-9:30 John Chalker
*Electron Interactions and Transport
Between Coupled Quantum Hall Edge States*
- 9:30-9:50 Stefano Roddaro
Non-linear transport and particle-hole symmetry in a quantum Hall device
- 9:50-10:10 İnanç Adagideli
Intrinsic Spin Hall Edges
- 10:10-10:30 Branislav Nikolić
*Mesoscopic spin Hall effect in multiterminal spin-orbit coupled nanostructures:
Local spin densities, total pure spin currents, and their shot noise*

10:30-11:00 **Coffee (Foyer)**

MR2 Quantum Hall Effect and Transport II (Chair: Henning Schomerus)

- 11:00-11:30 Sergey Dorozhkin
*Interplay of inter and intra-Landau-level transitions in
microwave photoresponse of two-dimensional electron systems*
- 11:30-12:00 Marek Potemski
*Quasi-excitons and fractionally charged excitons in the vicinity
of the $\nu = 1/3$ fractional quantum Hall state*
- 12:00-12:30 Matthew Grayson
*Bending the quantum Hall effect: Novel metallic and insulating states
in one dimension*
- 12:30-13:00 Boris Altshuler
Dephasing without Heating: New Experiments and Old Theory
- 13:00-13:45 **Lunch (Foyer)**

Poster Presentations

- P1 Babak Abdollahi Pour
Spin-polarized shot noise in diffusive spin-valve systems with non-collinear magnetizations
- P2 Ilias Amanatidis and Steven Bailey
Carbon nanotube electron turbines: a novel design for man-made nano-motors
- P3 Alistair Armstrong-Brown
Observation of multiple soliton-like modes in the quantum Hall edge dynamics
- P4 Sophie Avesque
Correlations vs impurities: or how to go from fractions to integers in the quantum Hall effect
- P5 Christian Flindt
FCS of NEMS
- P6 Heidi Förster
Full counting statistics for voltage and dephasing probes in a Mach-Zehnder interferometer
- P7 Mihai Gabureac
Spin-polarized transport in atomic-size ferromagnetic constrictions
- P8 Iain Grace
Electron Transport in Molecular Wires
- P9 Alexander Grishin
Low Temperature Decoherence in Josephson Junction Qubits
- P10 Fabian Hassler
Using Qubits for Measuring Fidelity in Mesoscopic Systems
- P11 Christopher Hooley
To Be Announced
- P12 Babak Hosseinkhani
Magnetization Dynamics and Spin Pumping in Ferromagnetic Nanoclusters
- P13 Daniel Huertas-Hernando
Spin and interactions in chaotic quantum dots
- P14 Anna Kauch
Local momentum approach to multiorbital single impurity Anderson model with applications to transport in quantum dots
- P15 Pengshun Luo
Transport properties of Superconductor/Ferromagnet hybrid structures
- P16 Mohammad Ali Maleki
Superconducting proximity effect in ferromagnetic domain structures
- P17 Ghadir Mohammadkhani
Non-sinusoidal current-phase relations in diffusive ferromagnetic Josephson junctions
- P18 Jan Petter Morten
Spin transport in superconductors
- P19 Marcin Mucha-Kruczyński
Electronic bands of a graphite bilayer – comparison of AB and AA stacking
- P20 Kostantin Novoselov
Electric Field Effect in Thin Graphitic Films

- P21 Elisabetta Paladino
Decoherence and decoupling in superconducting nanocircuits
- P22 Theodoros Papadopoulos
Symmetry Breaking in Molecular Wires
- P23 Cyril Petitjean
Dynamically induced entanglement and decoherence. (The quantum to classical crossover)
- P24 Peter Polinak
Andreev Drag Effect via Magnetic Quasiparticle Focusing in SN Hybrid Waveguides
- P25 Alessandro Potenza
Superconducting critical temperature dependence on the layer sequence in Nb/Pd bilayers
- P26 John P. Robinson
Geometrical oscillations in the SAW induced acousto-electric effect
- P27 Stanislas Rohart
Magnetic anisotropy of mixed Co based clusters embedded in matrix
- P28 Adam Rycerz
Entanglement and transport through correlated quantum dot
- P29 Valentin Rytchkov
Quantum versus classical division of current fluctuations
- P30 Ken-ichi Sasaki
Stabilization mechanism of edge states in graphene
- P31 Skon Sirichantaropass
Even-Odd Effects in Monovalent Atomic Chains
- P32 Janine Splettstößer
A diagrammatic approach to adiabatic pumping
- P33 Tihomir Tenev
Modeling spin resolved transport through InSb quantum well
- P34 Oleksandr Tsyplyatyev
Spin current generated by a thermal flow, magnetothermopower and magnetoresistance in metals embedded with magnetic nanoclusters
- P35 Daniel Urban
Spin-dependent transport through quantum dots connected to three ferromagnetic leads
- P36 Jing Zou
Variable-polarization source of spin-polarized current