

Sunday 12 July- overview

Sunday 12 JULY		VENUE
16:00-19:00	Registration	<i>ESLC</i>
17:00-20:00	Welcome Reception	

Monday 13 July- overview

MONDAY 13 JULY		VENUE
09:00-09:30	Opening Ceremony	<i>Coates Road Auditorium</i>
09:30-10:30	Plenary Lecture: P. Delsing , Acoustic waves and a superconducting qubit. Session Chair: A. Kent	<i>Coates Road Auditorium</i>
10:30-11:00	Tea/Coffee Break	<i>ESLC</i>
SESSION	Mo1: Light, Neutron and X-ray scattering Session Chair: T. Dekorsy	<i>Coates Road Auditorium</i>
11:00-11:30	Invited Lecture: M. Bargheer , Diffraction experiments on the lattice dynamics of (anti-)ferromagnetic thin films	
11:30-11:45	A. Bojahr , Nonlinear Phononics on the Nanoscale	
11:45-12:00	P.-A. Mante , Confinement effect on phonon-photon coupling in semiconductor nanowires.	
12:00-12:15	K. Iwasa , Nucleation of metastable superlattice in soft anharmonic phonon systems RB6 (R = Gd and Tb).	
12:15-12:30	H. Martinho , Quantum effects in glassy state of biomolecules: the case of L-cysteine.	
12:30-12:45	T. Forrest , Experimental and theoretical studies of the lattice dynamics in superconducting BaNi ₂ (As _{1-x} Px) ₂ .	
12:45-13:00	S. Elsässer , Raman spectroscopy with spin-phonon coupling as a quasi-local probe of magnetic order in multiferroic Eu(1-x)Ho(x)MnO(3) compounds	
13:00-14:00	Lunch Buffet	<i>ESLC</i>
SESSION	Mo2: NEMS, MEMS and Optomechanical systems Session Chair: P. Santos	<i>Coates Road Auditorium</i>
14:00-14:30	Invited Lecture: E. Weig , Phonons in MEMS and NEMS and optomechanical systems	
14:30-14:45	T. Czerniuk , Lasing from active optomechanical resonators	
14:45-15:00	A. Fainstein , Optomechanics in GaAs Vertical Pillar DBR Cavities	
15:00-15:15	G. Weiss , Probing individual atomic tunneling systems with superconducting qubits.	
15:15-15:45	Tea/Coffee Break	<i>ESLC</i>
SESSION	Mo3: Electron-Phonon Interactions Session Chair: A. Maznev	<i>Coates Road Auditorium</i>
15:45-16:00	A. Girard , Resonance effects in the detection of vibrational modes of coupled gold nanoparticles.	
16:00-16:15	A. Hauber , Phonon content of collective modes and carrier mobility in highly-doped polar semiconductors.	
16:15-16:30	B. Jusserand , Photoelastic resonances in phononic structures.	
16:30-16:45	F. Murphy-Armando , Electron-hole recombination in Bismuth from First Principles.	
16:45-17:00	M. Stroscio , Resonant Interface-Phonon-Assisted Transitions to Enhance Transition Rates in Single-Well—Double-Well Heterostructure Photodetectors.	
17:00-17:15	D. Reiter , Squeezed phonons created by ultrafast optical excitation of a semiconductor quantum dot.	

Tuesday 14 July- overview

TUESDAY 14 JULY		
09:00-10:00	Plenary Lecture: K. Nelson , Acoustic Phonons on all Length and Time Scales in Solids and Liquids. Session Chair: E. Weig , <i>Coates Road Auditorium</i>	
10:00-10:30	Tea/Coffee Break	
SESSIONS	Tu1(a): Phonons in Glasses and Disordered Systems, <i>ESLC</i> Session Chair: S. Skipertov	Tu1(b): Phonon Transport, <i>Coates Road Auditorium</i> Session Chair: K. Pipe
10:30-11:00	Invited Lecture: T. Nakayama , Thermoelectric clathrates - realizing the phonon-glass electron-crystal concept	O. Gendelman , Heat conduction in a model of dissociating atomic chain N. Vast , Electron-phonon and phonon-phonon coupling in semiconductors and bismuth, theoretical approaches
11:05-11:20	V. Achilleos , Energy transport in a disorder granular lattice	Invited Lecture B. Li , Anomalous Heat Conduction in Low Dimensional Nonlinear Lattices
11:20-11:35	M. Foret , Vitreous silica pressurized under helium fluid	
11:35-11:50	J. Page , Phonon transport in weakly confined granular media	W. Jaber , Phonon heat conduction from sub-mean free path sources measured with electrical means
11:50-12:05	E. Peronne , Temperature dependence of hypersound attenuation in silica films via ultrafast acoustics	V. Jean , Thermal rectification in silicon nanofilm with non-constant porosity
12:05-12:20	D. Szewczyk , Thermal properties of a low-dimensional glass	W. Li , Role of the filler in the reduction of thermal conductivity in skutterudites
12:20-12:35	A. Henry , Thinking beyond the phonon gas model	Y. Liu , Significant Reduction of Thermal Conductivity in a Nanostructured Semiconductor Single Crystal
12:35-14:30	Lunch Buffet/ Poster Session	
SESSIONS	Tu2(a): Coherent Phonons Session Chair: K. Nelson , <i>Coates Road Auditorium</i>	Tu2(b): Phonons in nanoscale materials and structures Session Chair: F. Vallee , <i>ESLC</i>
14:30-15:00	Invited Lecture: D. Navarro Urrios , A self-stabilized coherent phonon source driven by optical forces	L. Andrea , Ab initio phonon properties in doped Ni(Ti,Zr,Hf)Sn half-Heusler thermoelectric materials S. Merabia , Thermal transport across metal-non metal interfaces and core-shell nanoparticles
15:00-15:15	A. Koreeda , Optical control of Second Sound in Quantum Paraelectric SrTiO ₃	J. Margueritat , Ultra Low Frequency Raman Scattering of Silver Nano-Needles
15:15-15:30	R. Wilson , Generation of coherent single-polarization 246 GHz nanosecond-pulsed longitudinal acoustic phonons in nipi silicon doping superlattices	H.-Y. Chen , Measurement of Phonon Transports through an Atomically-thin Interfacial Layer by THz Ultrasonics
15:30-15:45	P. Ruello , Ultrafast light-induced Coherent Optical and Acoustic Phonons in few Quintuple Layers of Topological Insulators Bi ₂ Te ₃	D. Wigger , Acoustic phonon wave packet emission caused by switching on the optical excitation of a quantum dot
15:45-16:00	M. Grossmann , Hypersonic Lamb Waves in Silicon Membranes	T. Nghiem , Heat transfer through a phononic array in the linear and non-linear regimes
16:00-16:30	Tea/Coffee Break	

SESSIONS	Tu3(a): Phononic Crystals, Session Chair: D. Lanzillotti-Kimura, <i>Coates Road Auditorium</i>	Tu3(b): Phonon Transport, Session Chair: B. Li, <i>ESLC</i>
16:30-17:00	Invited Lecture: D. Yakovlev, Coherent phonons in 3D periodic nanostructures: experiments with opals and colloidal supra-crystals	E. Nefzaoui, Phonon confinement analyzed with the Boltzmann transport equation solved by the discrete ordinates method in 1D and 2D configurations J. Ordonez-Miranda, Thermal Energy Transport in a Surface Phonon-Polariton Crystal
17:00-17:15	F. Alzina, Silicon nanomembrane-based phononics	D. Photiadis, Phonon propagation in a suspension of 1D filaments - self consistent theory
17:15-17:30	I. Maasilta, Low temperature thermal properties of two-dimensional phononic crystals	T. A. Puurtinen, Radial phononic thermal conductance in thin membranes in the Casimir limit
17:30-17:45	S. Mizuno, Frequency gaps not originating from Bragg reflection in a solid-liquid phononic crystal	S.-C. Yang, Investigation of Hypersonic Wave's Transmission at the Interface between a Nanorod Array and a Bulk Substrate
17:45-18:00	C. Hou, Finite Element Simulations of Surface Acoustic Waves in Nanostructured Phononic Crystals with Defects	S. Xiong, Thermal conductivity reduction in Si membrane with alloying and surface engineering

Wednesday 15 July- overview

WEDNESDAY 15 JULY		VENUE
09:00-10:00	Plenary Lecture: K.Pipe , Heat Transfer in Soft Materials Session Chair: B. Perrin	<i>Coates Road Auditorium</i>
10:00-10:30	Tea/Coffee Break	<i>ESLC</i>
SESSION	We1: Phonons in emerging 2D systems Session Chair: D. Lehmann	<i>Coates Road Auditorium</i>
10:30-11:00	Invited Lecture: G. Fugallo , Thermal Conductivity of Graphene and Graphite: Collective Excitations and Mean Free Paths	
11:00-11:30	Invited Lecture: L. Zhang , Chiral Phonons in 2D Systems	
11:30-11:45	H. Taira , Electron-phonon interaction in a dynamically curved graphene	
11:45-12:00	I. Altfeder , Quantum Interference Patterns of Two Dimensional Phonons	
12:00-12:15	A. Arora , Thermal conductivity and rectification study of restructured Graphene	
12:15-12:30	H. Jeong , Role of graphene for heat dissipation in LEDs: the coherent phononic perspective	
12:30-13:30	Lunch Buffet	<i>ESLC</i>
14:30-23:30	Conference Excursion , Stratford upon Avon, Royal Shakespeare Company Theatre: The Merchant of Venice Buses leave at 14:30 from Ancaster Hall	

THURSDAY 16 JULY		
SESSIONS	Th1(a): Phonon Transport, Session Chair: S. Skipetrov, <i>ESLC</i>	Th1(b): Coherent Phonons, Session Chair: P. Ruello, <i>Coates Road Auditorium</i>
09:00-09:30	M. Massoud , Effective thermal conductivity of nanophononic membrane strips investigated by scanning thermal microscopy and Raman thermometry R. Murphy , Reducing the thermal conductivity by driving PbTe and PbSe _{{0.5}Te_{0.5}} to a phase transition using strain	Invited Lecture: D. Lanzillotti-Kimura , Nanomechanics in three-dimensional optophononic resonators
09:30-09:45	J. Al-Otaibi , Phonon transport in PbTe-PbSe nanocomposites	A. Scherbakov , Resonant driving of magnetization by monochromatic coherent phonons
09:45-10:00	C-W. Chang , Micron-scale ballistic thermal conduction in two kinds of SiGe nanowires at room temperature	L. Belliard , Direct Observation of Gigahertz Coherent Guided Acoustic Phonons in Free-Standing Single Copper Nanowires
10:00-10:15	X. Yang , Phonon scattering by nanoscale precipitates in thermoelectric composites	A. Devos , Acousto-optic resonance in ultra-thin silicon membranes
10:15-10:30	R. Wilson , Intrinsic Limits to the Interfacial Thermal Conductance	
10:30-11:00	Tea/Coffee Break	
SESSIONS	Th2(a): Phonons in nanoscale materials and structures Session Chair: C. Mellor, <i>ESLC</i>	Th2(b): Surface Acoustic Waves Session Chair: P. Delsing, <i>Coates Road Auditorium</i>
11:00-11:30		Invited Lecture: P. Santos , Control of Exciton-Polariton Condensates by Acoustic Lattices
11:35-11:50	M. Zalalutdinov , Acousto-optic probing of live stem cells	J.-Y. Duquesne , Acoustic control of magnetization in a ferromagnetic semiconductor thin film
11:50-12:05	K. Termentzidis , Phonons in anisotropic nanostructures	J. Janusonis , Frequency Tunable Surface Magneto-Elastic Waves in a Nickel Film
12:05-12:20	F. Hofmann , Helium-implantation-induced changes in elastic properties of tungsten: surface acoustic wave measurements and multiscale modelling	B. C. Daly , Picosecond Ultrasonic Studies of Surface Acoustic Waves on Patterned Layered Nanostructures.
12:20-12:35	E. Alonzo-Redondo , Hypersonic phononic particle brush materials	H. J. Krenner , Fourier Synthesis and timbre tuning of tailored nanomechanical pulses
12:35-14:30	Lunch Buffet/Poster Session	
SESSIONS	Th3(a): Coherent Phonons Session Chair: A. Fainstein, <i>ESLC</i>	Th3(b): Phonon Transport Session Chair: T. Nakayama, <i>Coates Road Auditorium</i>
14:30-15:00		Invited Lecture: S. Skipetrov , Ultrasound at the Anderson localization transition
15:05-15:20	Y. Guillet , Ultrasensitive Brillouin scattering detection of the GHz hypersounds generated by an optically excited single nanorod	K. Saaskilahti , Spectral analysis of non-equilibrium phonon transmission in the Fermi-Pasta-Ulam chain.
15:20-15:35	C. Poyser , Coherent Phonon Optics	A. Tavakoli , Specific heat of 2D suspended SiN membranes at low temperature
15:35-15:50	R. Kini , Generation of coherent acoustic phonons in GaAs _{1-x} Bi _x	J. Maire , Thermal conductivity tuning by disorder in Silicon phononic crystal
15:50-16:05	M. Lejman , Coherent longitudinal and shear acoustic phonons monitored by ultrafast laser pulses in ferroelectric BiFeO ₃ .	S. Sichkar , Dynamical and transport properties of HfB ₂ , ScB ₂ and MgB ₂
16:05-16:20	É. Murray , First-principles calculation of femtosecond symmetry-breaking atomic forces in photoexcited bismuth	J.-P. Péraud , Asymptotic solution methods for the phonon Boltzmann equation and application to the Kapitza conductance problem
19:00-23:00	Conference Dinner , The Carriage Hall, Perkins Restaurant Plumtree, Buses leave at 19:00 from Ancaster Hall	

Friday 17 July- overview

FRIDAY 17 JULY		VENUE
09:00-10:00	Plenary Lecture: F. Vallee , Acoustic Vibrations of Nanoparticles Session Chair: A. Akimov	<i>Coates Road Auditorium</i>
10:00-10:30	Tea/Coffee Break	<i>ESLC</i>
SESSION	Fr1: New Phonon Techniques Session Chair: J. Dijkhuis	<i>Coates Road Auditorium</i>
10:30-11:00	Invited Lecture: Y.-D. Jho , Electrically Switching Transverse Acoustic Phonons	
11:00-11:15	A. Maznev , Upholding the diffraction limit in the focusing of light and sound	
11:15-11:30	N. K. Ravichandran , Direct Measurement of Phonon Specularity in Silicon membranes using Transient Grating Spectroscopy	
11:30-11:45	S. Heywood , Heterodyne detection of coherent acoustic waves in a Schottky diode	
11:45-12:00	J. N. Hernandez Charpak , Uncovering collective diffusion from nanoscale heat sources with coherent EUV beams	
12:00-12:15	A. Apostolakis , Acoustic Control of Electron Dynamics in Semiconductor Superlattices	
12:15-12:30	H. Ogi , Thermal Mode Spectroscopy for Measuring Thermal Conductivity of Small Solids Lunch Buffet	
12:30-13:00	Closing Session	