TERANET UK-THz Symposium at NPL

Symposium start: 1.00 pm Wed 4th December 2019
Symposium dinner: 7.00 pm Wed 4th December 2019
Symposium finish: 1.50 pm Thu 5th December 2019
Optional lab tours: 1.50 pm to 3.00 pm Thu 5th December 2019

Wednesday 4th December (1.00 pm to 5.30 pm)			
1.00 pm to 2.00 pm	**Registration / exhibits**		
Session 1 (2.00 pm to 3.40 pm) Chair: John Cunningham			
2.00 pm to 2.10 pm	Welcome and Introduction		
	Presenter	**Affiliation**	**Title**
2.10 pm to 2.40 pm	Emma MacPherson	Warwick University	**Keynote presentation**: THz research at Warwick University
2.40 pm to 2.52 pm	Hui Wang	STFC-RAL Space	GRaCE: a G-band (200 GHz) Radar for Cloud Evaluation
2.52 pm to 3.04 pm	Riccardo Degl'Innocenti	Lancaster University	Active terahertz polarization modulators
3.04 pm to 3.16 pm	Nart Daghestani	STFC Rutherford Appleton Laboratory	Installation of a 350GHz heterodyne radiometer on the Mexican Large Millimetre Telescope
3.16 pm to 3.28 pm	Vasileios Georgiadis	The University of Manchester	Characterizing the Accelerating Mode of a Dielectric-lined Waveguide Designed for Terahertz-driven Manipulation of Relativistic Electron Beams
3.28 pm to 3.40 pm	Peter Weightman	Liverpool University	Support for THz experiments on the free electron lasers in Nijmegen
3.40 pm to 4.30 pm	**Coffee / posters / exhibits**		
Session 2 (4.30 pm to 5.30 pm) Chair: Irshaad Fatadin			
4.30 pm to 4.42 pm	Morgan Hibberd	The University of Manchester	Terahertz-driven Acceleration of a Relativistic 35 MeV Electron Beam
4.42 pm to 4.54 pm	Andrei Gorodetsky	University of Birmingham	Quantum dot materials for THz generation applications
4.54 pm to 5.06 pm	Jin Zhang	Queen Mary University of London	Design of 0.365-THz Backward Wave Oscillator using Staggered Double Grating / Folded Waveguide SWS and Sheet Beam
5.06 pm to 5.18 pm	Kaveh Delfanazari	University of Cambridge	Superconducting terahertz devices and systems
5.18 pm to 5.30 pm	Graham Smith	University of St Andrews	A 1000 x increase in concentration sensitivity for pulsed electron magnetic resonance measurements
Dinner (7.00 pm - 10.00 pm)			

Thursday 5th December 9.00 am to 1.50 pm			
Session 3 (9.00 am to 10.30 am) Chair: Nick Ridler			
	Presenter	**Affiliation**	**Title**
9.00 am to 9.30 am	Euan Hendry	Exeter University	Keynote presentation: Computational mm-wave and THz imaging
9.30 am to 9.42 am	Lauren Barr	University of Exeter	Using geometry to improve modulation for single-pixel THz imaging
9.42 am to 9.54 am	Reshma Anamari Mohandas	University of Leeds	High-resolution frequency control of a terahertz laser
9.54 am to 10.06 am	Rodolfo Hermans	University College London	Optical communications-based platform uses Uni-Travelling-Carrier Photodiode for ultra-high resolution software-defined THz spectroscopy and reveals LiYF4:Ho intrinsic spectral line shape
10.06 am to 10.18 am	Marco Peccianti	University of Sussex	Hyperspectral terahertz microscopy via nonlinear ghost imaging
10.18 am to 10.30 am	Peter Huggard	STFC Rutherford Appleton Laboratory	Schottky devices for 0.3 THz communications
10.30 am to 11.30 am	**Coffee / posters (sign up for lab tours)**		
Session 4 (11.30 am to 12.50 pm) Chair: Emma MacPherson			
11.30 am to 11.42 am	David Humphreys	National Physical Laboratory	Meteracom: Metrology for THz communications
11.42 am to 11.54 am	Simone Zonetti	Imperial College London	Terahertz plasmons in two-dimensional electron systems
11.54 am to 12.06 pm	Lucy Hale	University College London	Perfectly Absorbing Metasurfaces for Efficient Terahertz Detection
12.06 pm to 12.18 pm	Tianzhong Zhang	Queen Mary University of London	Investigation of a w-band rising-sun magnetronic
12.18 pm to 12.30 pm	Rosamund Herapath	University of Exeter	Impact of pump wavelength on terahertz emission of a cavity-enhanced spintronic trilayer
12.30 pm to 12.42 pm	Darren Graham	The University of Manchester	Role of Magnetic Field in THz Emission from a Spintronic Source
12.42 pm to 12.50 pm	Wrap up / poster prize award		
12.50 pm to 1.50 pm	**Lunch**		
1.50 pm to 3.00 pm	**Tours of NPL labs (optional)**		

Posters

Presenter	Affiliation	Poster Title
Varun Kamboj	University of Cambridge	Investigating Ferromagnetism in $Cr_xSb_{2-x}Te_3$ thin films
Rowan Parker-Jervis	University of Leeds	Resonance anti-crossing in low-dimensional electronic systems
Maria Burdanova	University of Warwick	Optically controlled THz and NIR modulators based on doped CNT thin films
Matthew Reeves	University of Bath	THz pump-probe studies of the carrier dynamics in the phase change material GST
Nikollao Sulollari	University of Leeds	Study of Spoof Surface Plasmons using s-SNOM
Robert Donnan	Queen Mary University of London	Application of sub-THz Circular Dichroism Quasi-Optics to Probe the Conformality of Solvated Protein
Hannah Hatcher	University of Warwick	Using THz in vivo imaging to quantify changes in the skin
Barker Xavier	University of Warwick	Adapting Sparse Deconvolution for in vivo Skin Measurements
Suzanna Freer	University of Birmingham	Time-Domain Spectroscopy Beam Profiling
Decio Alves De Lima	Lancaster University	Terahertz transmission imaging for proton exchange membrane fuel cell applications
Yury Malevich	University of Manchester	Graphene-enabled High-speed Terahertz Spatial Modulators
Eleanor Nuttall	University of Leeds	Spectral analysis of gas-phase reactions using self mixing with a THz QCL
Luana Olivieri	University of Sussex	3D THz ghost-imaging via coherent spatio-temporal refocusing
Lauren Barr	University of Exeter	Modulators for single-pixel THz imaging
Mohammed Salih	University of Leeds	High power terahertz quantum cascade lasers with a single mode
Wladislaw Michailow	University of Cambridge	Combining Terahertz, Optics, and Cryogenics
Nick Ridler	National Physical Laboratory	The TEMMT Project: Traceability for Electrical Measurements at Millimetre-wave and Terahertz frequencies for communications and electronics technologies

Exhibits

Exhibitor	Representative
Rohde & Schwarz UK Ltd	Phil McCluskey
Photonic Solutions	Elaine Blackwood
QMC Instruments LTD	James Cox
The IET	Xiaobang Shang
Toptica Photonics UK	Svetla Potter
Menlo Systems	Milan Oeri
Anritsu EMEA Limited	Ricci Raffaella
Teraview	Alessia Portieri

Venue Information

National Physical Laboratory
Hampton Road
Teddington
Middlesex
TW11 0LW

Public transport

Buses: 33, 281, 285, 481, R68 and X26 all serve Teddington.
Please note that local buses do not accept cash.

Trains: Regular services connect Teddington with London Waterloo in approximately 30 minutes.

From Heathrow: Routes 285, and the faster X26 both connect Teddington with Heathrow Airport. A taxi journey will take approximately 30 minutes.

Trains: Regular services connect Teddington with London Waterloo in approximately 30 minutes.

From Heathrow: Routes 285, and the faster X26 both connect Teddington with Heathrow Airport. A taxi journey will take approximately 30 minutes.