

This schedule shows where you will find papers and posters authored by Hub researchers, featured over the conference.

\*Hub investigators are shown in *italics*.

## Monday January 30, 2017

**LASE - Solid State Lasers XXVI: Technology and Devices (10082)** Conference Chair: *Clarkson*. Programme Committee including: *Mackenzie*.

**Session 1: Donut Modes and Vortex Beam SSLs (Rm 132 North Exhibit Level):**

**08:50** Radially-polarised beam amplification in an Yb:YAG thin-slab architecture, #10082-3. *Smith, Beecher, Mackenzie, Clarkson*

**Session 2: Eyesafe and Mid-IR Lasers I (Room 132 North Exhibit Level):**

**11:40** Er:YGG planar waveguides grown by pulsed laser deposition for LIDAR applications, #10082-9. *Mackenzie, Grant-Jacob, Beecher, Riris, Yu, Shepherd, Eason*

**LASE - Frontiers in Ultrafast Optics: Biomedical, Scientific, and Industrial Applications XVII (10094)**

**Session 8: 3D Structuring of Transparent Materials II (Rm 130 North Exhibit Level):**

**15:50** The art of ultrafast laser writing (Invited Paper) #10094-33. *Kazansky*

**OPTO - Gallium Nitride Materials and Devices XII (10104)**

**Session 2: Growth II (Rm 307 South Esplanade):**

**13:30** Development of high-quality semi-polar GaN for long wavelength emitters (Invited Paper), #10104-5. *Wang*

**OPTO - Optical Interconnects XVII (10109)** OPTO Symposium Co-Chair: *Reed*. Programme Committee including: *Thomson*.

**Session 3: Hybrid Integrated Optical Link Modules (Rm 306 South Esplanade)**

**17:30** Silicon photonic transceivers for beyond 1-Tb/s datacom applications (Invited Paper), #10109-15. *Olivier, Sciancalepore, Hassan, Fowler, Ben Bakir, Ferroti, Duprez, Durel, Abraham, Plantier, Szelag, Menezo, Baudot, Boeuf, Gardes, Hattasan, O'Faolain, Marris-Morini, Ghilioni, Bruccoleri, Martinez, Pitwon, Cramer, Lamprecht*

**OPTO - Advanced Fabrication Technologies for Micro/Nano Optics & Photonics X (10115)**

**Session 6: Advanced Fabrication with DMD and SLM Devices (Rm 110 North Exhibit Level):**

**14:20** Digital micromirror device based adaptive optics approach for enhanced micro-machining fidelity, #10117-5. *Heath, Mills, Grant-Jacob, Feinaeugle, Goriainov, Oreffo, Eason*

## Tuesday January 31, 2017

**BIOS - Photons Plus Ultrasound: Imaging and Sensing 2017 (10064)**

**Session 8: All-optical and Laser Ultrasound Systems (Rm 2010 West Level 2):**

**14:30** A novel fibre laser for fast multiwavelength laser scanning OR-PAM #10064-70. *Allen, Xu, Alam, Richardson, Beard*

**LASE - Fiber Lasers XIV: Technology and Systems (10083)**

**Session 5: Mode Instability (Rm 131 North Exhibit Level):**

**08:00** Transverse mode instability analysis in fiber amplifiers (Invited paper) #10083-21. *Zervas*

**Session 8: Novel Fiber Design and Materials (Rm 131 North Exhibit Level):**

**16:10** Design and characterisation of SRS filtering optical fibre for pulsed fibre laser beam delivery #10083-37. *Vukovic, Chan, Gorman, Petrovich, Hayes, Malinowski, Codemard, Zervas*

**17:10** Numerical optimisation of pump absorption in doped double-clad fiber with transverse and longitudinal perturbation #10083-40. *Codemard, Malinowski, Zervas*

**LASE - Laser Resonators, Microresonators, and Beam Control XIX (10090)**

**Session 5: Microresonators: Novel Topologies and Devices II (Rm 133 North Exhibit Level)**

**08:40** PCSELS with lateral optical feedback #10090-21. *Taylor, Li, Ivanov, Childs, Stevens, Babazadeh, Ignatova, Hogg*

**LASE - Nonlinear Frequency Generation and Conversion: Materials and Devices XVI (10088)**

**Session 4: Supercontinuum and Raman Generation (Rm 120 North Exhibit Level):**

**11:10** Exploring nonlinear pulse propagation, Raman frequency conversion and near octave spanning supercontinuum generation in atmospheric air-filled hollow-core Kagomé fiber #10088-15. *Mousavi, Mulvad, Alam, Wheeler, Bradley, Horak, Hayes, Sandoghchi, Richardson, Poletti*

**Session 6: Nonlinear Optical Devices and Techniques II (Rm 120 North Exhibit Level):**

**16:00** Ductile mode dicing for PPLN waveguide devices #10088-23. *Carpenter, Berry, Gawith*

Don't forget to visit us in the exhibition at Booth #5037 (Hall D, North Hall), where we will be part of the UK Pavilion. You can also book a one-to-one meeting with Dr John Lincoln, Industrial Liaison Manager, at [www.photonicshubuk.org/events/spie-photonics-west-2017/](http://www.photonicshubuk.org/events/spie-photonics-west-2017/)

Tuesday January 31, 2017 continued

### OPTO - Smart Photonic and Optoelectronic Integrated Circuits XIX (10107)

#### Session 1: Integrated Nanophotonic Devices I (Rm 2007 West Level 2)

14:00 Subwavelength metamaterial engineering for silicon photonics (Invited Paper) #10107-3. Halir, Ortega-Moñux, Soler-Penadés, Luque-González, Sarmiento-Merenguel, Sánchez-Postigo, Wangüemert-Pérez, Schmid, Xu, Janz, Lapointe, Molina-Fernández, Nedeljkovic, Mashanovich, Cheben

### OPTO - Silicon Photonics XII (10108)

#### Session 7: Waveguide Devices II (Rm 308 South Esplanade)

15:30 Group IV compounds and silicon nitride for multiplatform integrated photonics (Invited Paper) #10108-2. Gardes, Domínguez Bucio, Mastronardi, Hattasan, Grabska, Littlejohns, Banakar, Reed, Mashanovich, Runge, Franz, Peacock

### OPTO - Broadband Access Communication Technologies XI (10128)

#### Session 3: Special Workshop on Advanced Optical Fibers and Amplifiers for SDM and Data Centers (Rm 301 South Esplanade)

14:40 SDM amplifiers (Invited Paper) #10130-3. Jung, Kang, Alam, Richardson

### OPTO - Optical Metro Networks and Short-Haul Systems IX (10129)

#### Session 4: Silicon Photonics and Alternative Technologies for Data Centers and Short Hauls (Rm 133 North Exhibit Level)

17:50 Novel paradigm for integrated photonics circuits: transient interconnection network #10130-5. Fazio, Belardini, Bastiani, Sapienza, Chauvet, Zheludev, Soci

### OPTO - Quantum Dots and Nanostructures: Growth, Characterization and Modeling XIV (10114)

#### Session 6: Quantum Dot Devices and Materials (Rm 2008 West Level 2)

14:30 Universal growth scheme for entanglement-ready quantum dots at telecom wavelength #10114-22. Muller, Skiba-Szymanska, Stevenson, Varnava, Felle, Huwer, Farrer, Krysa, Spencer, Ritchie, Heffernan, Shields

## Wednesday February 1, 2017

### OPTO - Smart Photonic and Optoelectronic Integrated Circuits XIX (10107)

#### Session 3: Silicon-plus Photonics (Rm 110 North Exhibit Level)

08:30 Ion implantation in silicon to facilitate testing of photonic circuits (Invited Paper) #10107-9. Reed, Milosevic, Chen, Thomson

### OPTO - Silicon Photonics XII (10108)

#### Session 10: Fabrication and Manufacturing of Silicon Photonics (Rm 308 South Esplanade)

14:10 Towards autonomous testing of photonic integrated circuits #10108-43. Milosevic, Chen, Thomson, Reed  
(Session 9 Mid-IR Silicon Photonics Chair: Gardes. Session 11 Light Emission II Chair: Reed)

### OPTO - Physics, Simulation, and Photonic Engineering of Photovoltaic Devices VI (10099)

#### Session 9: Light Management II (Rm 274 (South Mezzanine))

18:00 Spectral properties of Al<sub>1-x</sub>Ga<sub>x</sub>AsSb in avalanche photodiodes for security applications #10099-4. Gandan, Dominguez Morales, Zhou, Tan, Ng

### OPTO - Posters (Moscone West Levels 2 and 3)

#10106-63 Design and fabrication of photonic quasi-crystal light coupler and splitter on low refractive index material. Shi, Pollard, Charlton

#10111-119 Fabrication, characterization, and epitaxial optimization of MOVPE-grown resonant tunnelling diode optical emitters. Baba, Jacobs, Stevens, Harrison, Mukai, Hogg

#10114-34 Characterisation of MOVPE InAs/GaAs QDs grown by MOVPE with and without strain balancing. Roberts, Clarke, Stevens, Tooley, Orchard, Farrer, Childs, Babazadeh, Ozaki, Mowbray, Hogg

## Thursday February 2, 2017

### LASE - Fiber Lasers XIV: Technology and Systems (10083)

#### Session 13: Fiber Characterization (Rm 131 North Exhibit Level). Session Chair: Zervas

10:30 Effects of coating thickness on high power metal coated fibre lasers (Invited Paper) #10083-61. Daniel, Simakov, Hemming, Clarkson, Haub

### OPTO - Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications X (10103)

#### Session 13: Terahertz Detectors and Sources III (Rm 270 South Esplanade)

11:30 THz wave generation through 2nd order non-linear excitonic effects in GaAs/AlAs MQWs at room temperature #10103-62. Majeed, Ivanov, Stevens, Childs, Kojema, Hogg

### OPTO - Gallium Nitride Materials and Devices XII (10104)

#### Session 14: LEDs II (Rm 307 South Esplanade)

12:15 Gallium nitride light sources for optical coherence tomography #10104-66. Goldberg, Ivanov, Ozaki, Childs, Groom, Kennedy, Hogg