## **SAIP2016**

# Tuesday 05 July 2016

## Photonics: Laser development - 5C (10:00-10:40)

#### -Conveners: Hencharl Strauss

time [id] title		presenter
10:00	[292] Development of a large mode area (LMA), high-power, thulium-doped fibre laser	Mr MORRIS, Daniel
10:20	[516] Simulaser, a graphical laser simulator based on Matlab Simulink	Mr.JACOBS Cobus

## Photonics: SIlver medalist talk - 5C (11:10-12:10)

#### -Conveners: Andrew Forbes

time [id] title	presenter
11:10 [421] The interaction of high power cw laser beams with weakly absorbi optical elements	ng Mr RAMOKOLO, Rocky
11:30 [544] SILVER MEDALLIST LECTURE: Manipulating Structured Light	Dr DUDLEY, Angela

## Photonics: Ultrafast photonics - 5C (14:00-15:40)

### -Conveners: Pieter Neethling

time	[id] title	presenter
14:00	[296] Ultrafast mapping of structural changes in organic radical salts	Mr SMIT, A. Bart
14:20	[158] Supercontinuum Generation in Highly Birefringent Photonic Crystal Fibers	Mr JENA, James
	[394] PIRANA, an all optical time-domain ptychographic pulse characterisation method	Mr SPANGENBERG, Dirk-Mathys
15:00	[401] Supercontinuum characterisation and compression	Mr VILJOEN, Ruan
	[513] Investigating the optical properties of ANDi-PCFs for nonlinear imaging application	Mr DWAPANYIN, George Okyere

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# Wednesday 06 July 2016

## Photonics: Spectroscopy - 5C (09:40-10:40)

#### -Conveners: Christine Steenkamp

time	[id] title	presenter
	[233] A Tunable Vacuum Ultraviolet Light Source and High Intensity Saturation of the Nonlinear Medium	Dr RIGBY, Charles
	[239] Excitation spectroscopy with vibration selective detection for self-absorption free rovibronic spectra of CO	Mr DE BRUYN, Andre
10:20	[512] Integrated optical tweezer and fluorescence microscope.	Ms FRASMUS, Anneke

## Photonics: Bio Photonics - 5C (11:10-12:10)

#### -Conveners: Gurthwin Bosman

time	[id] title	presenter
	[362] The efficiency of Hypericin used in Photodynamic Therapy Treatment with low intensity laser irradiation to induce the cell death of human breast cancer cells (MCF7).	Ms NDIVITO, KIRO
11:30	[415] Photobiomodulation of Isolated Lung Cancer Stem cells	Ms CROUS, Anine
	[225] Exciton dynamics of individual plant light-harvesting complexes as revealed by fluorescence lifetime and intensity shifts.	Mr BOTHA, Joshua

## Photonics: Photonics - 5C (14:00-15:40)

## -Conveners: Erich Rohwer

time	[id] title	presenter
14:00	[146] Development of a free space, LED illuminated Spectral Domain Optical Coherence Tomography setup	Mr SULIALI, Nyasha
	[440] Experimental characterization of a metamaterial optical polarizer in the quantum regime.	Mr URIRI, Solomon A.
14:40	[443] Single-photon probing of plasmonic waveguides	Mr FRANCIS, Jason
15:00	[528] Division Meeting: Photonics	Prof. ROHWER, Erich

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# Thursday 07 July 2016

Photonics: Beams - 5C (09:40-10:40)

-Conveners: Melanie McLaren

time [id] title	presenter
09:40 [120] Hyper-entanglement for secure communication	Mr NAPE, Isaac
10:00 [148] Quantum transport with vector beams	Mr NDAGANO, Bienvenu
10:20 [214] A beam quality measure for vector beams	Ms SROOR, Hend

## Photonics: Ion trapping - 5C (11:10-12:10)

-Conveners: Angela Dudley

time [id] title		presenter
11:10	[481] Towards quantum feedback measurements with trapped Yb+ ions	Dr KHANYILE, Ncamiso
11:30	[495] NON-SPECIALIST LECTURE: Trapped ions for new frontiers in precision	Dr UYS, Hermann
	measurement	

SAIP2016 / Programme Friday 08 July 2016

# **Friday 08 July 2016**

## Photonics: Photonics - 5C (09:40-10:40)

## -Conveners: Hencharl Strauss; Pieter Neethling; Melanie McLaren; Erich Rohwer

time [id] title		presenter
09:40	[451] Modelling of a 2 micron cladding-pumped cw Tm-doped silica fibre laser	Dr WU, Lorinda
	[387] Development of high-power and high-energy solid-state lasers and amplifiers	Dr STRAUSS, Hencharl
10:20	[285] 14 W Mid-Infrared Optical Parametric Oscillator based on Zinc Germanium Phosphate	Dr KOEN, Wayne

## **Photonics: Photonics - 5C (11:10-12:10)**

time [id] title

### -Conveners: Hencharl Strauss; Andrew Forbes; Melanie McLaren; Erich Rohwer

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11:10	[178] Holographic toolkit for optical communication beyond orbital angular momentum	Dr ROSALES-GUZMAN, Carmelo
11:30	[327] Orthonormal polynomials for centred non-uniform rotationally symmetric	Dr MAFUSIRE, Cosmas

presenter