



# SAIP2017

## Tuesday 04 July 2017

### **Photonics: Non-Specialist Lecture - A306 (10:00-10:40)**

**-Conveners: Gurthwin Bosman**

time	[id] title	presenter
10:00	[243] Controlling light harvesting with light	Dr KRÜGER, Tjaart

### **Photonics: Quantum Optics I - A306 (11:10-12:10)**

**-Conveners: Hermann Uys**

time	[id] title	presenter
11:10	[49] Taking Twisted Classical light for a Quantum Walk	Ms SEPHTON, Bereneice
11:30	[137] Image Inversion via Quantum Ghost Imaging	Mr BORNMAN, Nicholas
11:50	[153] Delayed measure quantum eraser with orbital angular momentum	Mr NAPE, Isaac

### **Photonics: Classical Optics I - A306 (14:00-15:40)**

**-Conveners: Cosmas Mafusire**

time	[id] title	presenter
14:00	[236] Implementation of the orthonormal Zernike-based polynomials in the Extended Nijboer-Zernike diffraction theory	Dr MAFUSIRE, Cosmas
14:20	[332] The Wigner distribution function in characterising general optical fields of varying coherence	Mr MREDLANA, Prince
14:40	[63] Light can be fractal!	Ms SROOR, Hend
15:00	[50] Uncovering Orbital Angular Momentum with Mode Sorters	Ms SEPHTON, Bereneice
15:20	[103] An application of optical tweezers in the measurement of picoNewton forces	Ms ERASMUS, Anneke

# Wednesday 05 July 2017

## Photonics: PISA and Rental Pool Discussion - A306 (10:00-10:40)

## Photonics: Classical Optics II - A306 (11:10-12:10)

-Conveners: Carmelo Rosales-Guzman

time	[id] title	presenter
11:10	[372] Tailoring light in the mid-IR	Mr GAILELE, Lucas
11:30	[110] Mode Division Multiplexing mixing Different Orthogonal Bases	Mr COX, Mitchell
11:50	[119] Multiplexing of a densely-packed set of spatial modes	Mr BHEBHE, NKOSIPHILE ANDILE

## Photonics: Imaging and Spectroscopy I - A306 (14:00-15:40)

-Conveners: Tjaart Krüger

time	[id] title	presenter
14:00	[291] Ultrafast studies of lattice changes in organic Cu(DCNQI) <sub>2</sub> salts	Ms PAYNE, Nancy
14:20	[205] The Ultrafast Photo-Induced Metal-Insulator Phase Transition in Organic Cu(DCNQI) <sub>2</sub> Observed with Ultrafast Electron Diffraction	Mr SMIT, Bart
14:40	[237] Construction of a terahertz time-domain ellipsometer	Mr SMITH, Shane
15:00	[148] Phase and time-dependent second harmonic measurements of centrosymmetric materials	Dr NDEBEKA, Wilfrid Innocent
15:20	[222] Single beam Supercontinuum Coherent Anti-stokes Raman Spectroscopy	Mr VILJOEN, Ruan

## Thursday 06 July 2017

### **Photonics: Biophotonics II - A306 (10:00-10:40)**

**-Conveners: Pieter Neethling**

time	[id] title	presenter
10:00	[52] Cell death induced by combination of phthalocyanine photosensitizer and doxorubicin on MCF-7 breast carcinoma cells.	Mr ANIOGO, Eric Chekwube
10:20	[66] Photobiomodulation activates the JAK/STAT signaling pathway in diabetic wounded cells in vitro	Mr JERE, Sandy

### **Photonics: Quantum Optics II - A306 (11:10-13:10)**

**-Conveners: Christine Steenkamp**

time	[id] title	presenter
11:10	[279] Theoretical investigation of the Hong-Ou-Mandel interference in turbulence	Mr MABENA, Chemist
11:30	[281] Experimental investigation of the Hong-Ou-Mandel interference in turbulence	Dr PRABHAKAR, Shashi
11:50	[129] Interference of distinguishable photon states	Mr NDAGANO, Bienvenu
12:10	[68] Quantum-statistical phenomenon of sustainability and its manifestations in dissipative photonic systems	Dr ZLOSHCHASTIEV, Konstantin
12:30	[80] Optical sectioning with induced quantum optical coherence	Dr VALLES, Adam
12:50	[450] Beam shaping with controllable gain	Dr LITVIN, Igor

### **Photonics: Imaging and Spectroscopy II - A306 (14:00-15:40)**

**-Conveners: Adam Valles**

time	[id] title	presenter
14:00	[164] Determining the orientation of a radiating dipole through fluorescence microscopy	Ms HOLINIRINA DINA MIORA, Ratsimandresy
14:20	[203] Experimental Study of the Weak Field Zeeman Spectra of Rb 85 and Rb 87	Mr WYNGAARD, Adrian
14:40	[82] Development of a Supercontinuum based Nonlinear Optical Microscopy setup	Mr DWAPANYIN, George Okyere
15:00	[262] Diffusivity of single fluorescent probes embedded in thin polymer films	Ms SIBANDA, Charmaine
15:20	[338] A New Simplified Spatial Resolution Criterion to Obtain the MTF Curve From Edge Analysis in the Real Space	Mr RADEBE, Mabuti Jacob Radebe

### **Photonics: Photonics Division Meeting - A306 (16:10-17:10)**

**-Conveners: Andrew Forbes**