



# SAIP2022

## Monday 04 July 2022

### Photonics: Photonics in Biology - Zoom Platform (11:30-13:00)

**-Conveners: Pieter Neethling**

time	[id] title	presenter
11:30	[21] Synergistic Cytotoxic Effects of Photodynamic Therapy and Cannabidiol Treatment on Cervical Cancer Cells	Dr RAZLOG, Radmila Dr KRUGER, Cherie Ann
11:45	[61] Recombinant Antibody-Conjugated Silver Nanoparticles for Improved Drug Delivery in Photodynamic Therapy for Metastatic Melanoma	MALINDI, Zaria
12:00	[58] Antiproliferative and Cytotoxicity Effects of Aluminium (III) Phthalocyanine Chloride Tetra Sulphonic Acid Mediated Photodynamic Therapy on Oesophageal Cancer	Mrs DIDAMSON, Onyisi Christiana
12:15	[44] PBM at 660 nm reduces stress induced apoptosis in diabetic wounded fibroblast cells in vitro	Dr JERE, Sandy
12:30	[96] Photobiomodulation at 830 nm modulates proliferation and migration of wounded fibroblast cells	Ms LEYANE, Thobekile
12:45	[179] Photobiomodulation at 830 nm influences diabetic wound healing in vitro through modulation of inflammatory cytokines	Ms MGWENYA, Tintswalo

### Photonics: Spectroscopy and imaging - Zoom Platform (15:00-16:30)

**-Conveners: Gurthwin Bosman**

time	[id] title	presenter
15:00	[60] Comparison of modelling and measurements of resonance laser ionisation of zinc isotopes	STEENKAMP, Christine
15:15	[146] Wavelength calibration of a monochromator system	RABE, Irma
15:30	[94] Investigating the morphology of an optically trapped particle using Mie scattering	ERASMUS, Anneke
15:45	[82] Fourier Ptychographic Microscopy for high-resolution, large field of view imaging	FOUCHE, Eugene
16:00	[137] Resolution enhancement in quantum ghost imaging by machine intelligence	MOODLEY, Chané Simone

# Tuesday 05 July 2022

## Photonics: Quantum photonics - Zoom Platform (11:30-13:00)

-Conveners: Andrew Forbes

time	[id] title	presenter
11:30	[330] Realizing topological relativistic dynamics with slow-light polaritons	JORDAAN, Bertus
11:45	[100] Links and Twists within the Stokes Field	ORNELAS, Pedro
12:00	[101] Teleporting into high dimensions	Ms SEPHTON, Bereneice
12:15	[43] Effect of nanoparticle geometry on photon statistics	Dr UGWUOKE, Luke Dr UGWUOKE, Luke
12:30	[178] Quantum Photonic Entanglement	SMITH, André

## Photonics: Technology and communication - Zoom Platform (15:00-16:30)

-Conveners: Christine Steenkamp

time	[id] title	presenter
15:00	[8] Theoretical Modeling of Infrared Thermography	Dr NOLTING, Volkmar
15:15	[26] Simulation of Coherent Supercontinuum Generation in Silicon Germanium waveguide	Mr MUNSAKA, Proficiency
15:30	[29] Interferometric orbital angular momentum mode detection in turbulence with deep learning	COX, Mitchell
15:45	[39] Investigating Two-Mode Mode Diversity with Laguerre-Gaussian and Hermite-Gaussian Modes	DROZDOV, Alice
16:00	[124] Communicating through turbulence using classical-entanglement	SINGH, Keshaan

# Thursday 07 July 2022

## **Photonics: Beam shaping and manipulation - Zoom Platform (11:30-13:00)**

**-Conveners: Mitchell Cox**

time	[id] title	presenter
11:30	[81] Orbital and spin angular momentum interaction in second harmonic generation	TAVARES BUONO, Wagner
11:45	[235] Simulating a deformable mirror with a spatial light modulator	MOHAPI, Lehloa
12:00	[150] A New Angle on the Tilted Lens	PETERS, Cade Ribeiro
12:15	[145] Flattop beam shaping for use in optical fiber.	Ms PHALA, Ashley
12:30	[140] Broadband Beam Shaping Using Digital Micromirror Devices	Ms PERUMAL, Leerin Michaela

## **Photonics - Zoom Platform (15:00-16:30)**

# Friday 08 July 2022

**Photonics - Zoom Platform (11:30-13:00)**