

Join the Wits Structured Light team in 2023

PhD and Post Doc positions available

www.structured-light.org

Do you see yourself designing cutting edge quantum technologies, novel laser solutions for industry or discovering hidden physics using bright lasers and single photons? Then consider joining our team of vibrant, productive, and diverse researchers and graduate students from the *Structured Light Lab* at the University of the Witwatersrand.

Our university is one of the best in the country, with the School of Physics ranking #1 in South Africa.



We are looking for **1x PhD student** and **1x Post Doc** with experience in theoretical or experimental quantum information processing (entanglement, quantum measurements, etc.). We have a range of exciting projects on the go that include:

- Secure quantum communication using high-dimensional entanglement
- Teleportation of high-dimensional quantum states
- Interaction-free and ghost imaging
- Robust states of quantum light through complex media, including turbulence, living tissue and optical fibre

We also have positions for **1x PhD students** and **1x Post Doc** in classical structured light. We have a range of exciting projects on the go that include:

- High-power structured light
- Structured light lasers
- Vectorial light and its applications
- Free-space and underwater optical communication with structured light

Please email Prof. Andrew Forbes (andrew.forbes@wits.ac.za) to apply and include a CV and brief motivation. For further information you may email Dr Isaac Nape (isaac.nape@wits.ac.za) [quantum] and/or Dr Angela Dudley (angela.dudley@wits.ac.za) [classical]. The positions will close when successfully filled. The ideal starting date would be January 2023.