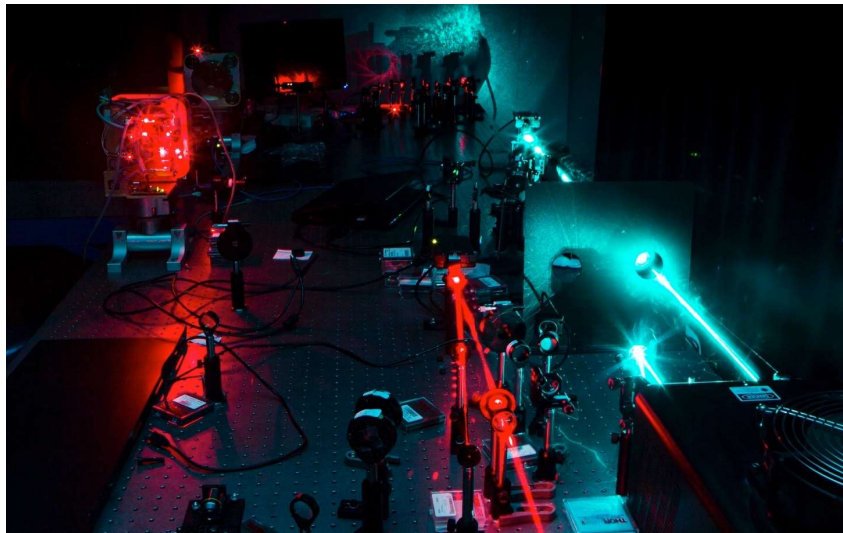


Structured Light Laboratory

PhD and MSc Studentships: Structured Light Lab - University of the Witwatersrand (2021)

Apply for a PhD or MSc studentship, if would you like to:

- Learn new theoretical, experimental and/or computational tools in photonics,
- Have the option of doing fundamental or applied research; working in academia, industry or a tech start-up,
- Work at Wits but also in our collaborators' labs,
- Meet national and international students at various conference events here in South Africa and abroad,
- Publish high-level science papers,
- Join a vibrant team where you can work closely with other students and post docs.



We have a range of exciting **MSc & PhD projects** in structured light, including quantum entanglement, quantum imaging, optical communications, metrology, high-power laser applications, optical trapping and tweezing, novel laser systems and photonic devices. We can tailor the project to be experimental, theoretical and/or computational, and usually teach students all three. Our projects span the very fundamental to the very applied. You do not have to have a background in these fields, rather, ask yourself if you would like to **learn** about one of these fields:

- Would I like to learn how to make my own laser?
- Would I like to learn how to do a quantum entanglement experiment?
- Would I like to learn how to make a practical photonic device?
- Would I like to learn about applications of light, e.g., in materials, biology, chemistry, engineering and physics?
- Would I like to learn about high-power lasers?
- Would I like to learn more about computational and theoretical tools?

Please email your motivation letter, CV and academic transcripts to Dr Angela Dudley (angela.dudley@wits.ac.za) and Prof Andrew Forbes (andrew.forbes@wits.ac.za).

