MQ Photonics Research Centre Seminar

MACQUARIE University

Speaker: *Mr Xuexong Yang*

Title: Sodium Guide Star Lasers Based on Fiber Raman & Diamond Raman.

Abstract: An artificial "guide star" generated by a high power narrow linewidth 589 nm laser is essential for ground large aperture telescopes to observe the universe with full resolution. My PhD project is to generate sodium guide star lasers based on fiber Raman and diamond Raman technologies. The contents of this talk include a Larmor frequency pulsed sodium guide star laser based on fiber Raman and a high power CW sodium guide star laser based on diamond Raman.
Bio: *Xueong Yang is a Cotutelle PhD student between University of Chinese Academy of Sciences and Macquarie University. His supervisors are Prof. Richard P. Mildren, Prof. David J. Spence and Prof. Yan Feng. This is the last year of his whole PhD project.*

Speaker: *Mr Saurabh Awasthi*

Title: Single Femtosecond Pulse Processing of Muscovite: Unconventional Mineral Water assisted Modifications.

Abstract: The focus of this talk will be the novel modification topologies induced at the muscovite surface upon single femtosecond (fs) pulse processing. I will also talk about the use of optical surface profilometry (OSP) in characterizing the complex modifications induced by the laser pulse and its contrast with the conventional FESEM technique.
Bio: *I am a PhD candidate in the department of Physics and Astronomy under the supervision of Prof. Deb Kane and A/prof. Alex Fuerbach. My research deals with the study of fundamental modification in the transparent dielectrics esp. layered minerals upon ultrafast pulse processing.*

When: Wednesday 04 December 2019
Time: 2pm
Where: Multipurpose room, 2.300 7WW