TITLE: Wider, Faster, Deeper: New Directions for Imaging in Biophotonics

ABSTRACT

Optical imaging has seen exceptional advances in the last two decades. In these talks I will describe routes for obtaining wide field images that minimise photodamage and enable deeper penetration into tissue. In particular I will explain the use of shaped light in the form of propagation invariant light fields and the use of complex photonics to achieve this goal.  Applications will focus on using these approaches in various forms of imaging particularly light sheet microscopy.