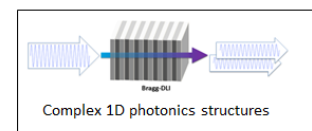
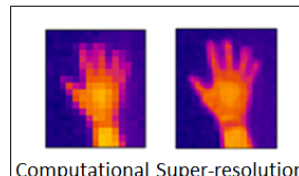
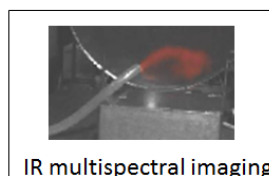
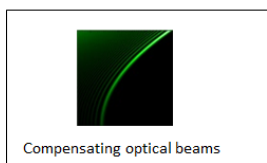
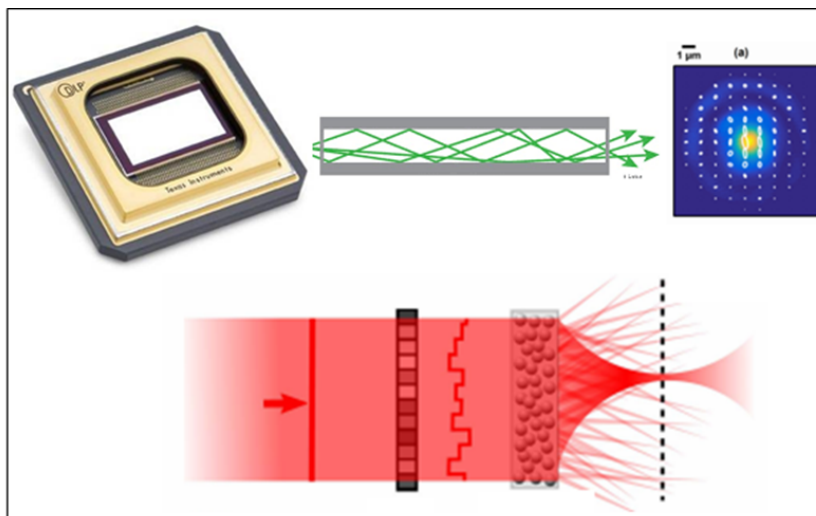


Optics and Photonics Group Lunchtime Seminar

“Complex media correction based on single pixel detection and full intensity-phase-polarisation control”

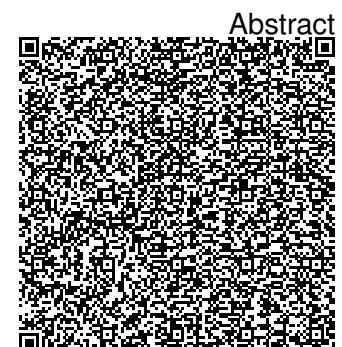
Miguel Preciado

University of Glasgow



1:00pm Monday 30th October 2017
203 Tower Building
All Welcome

http://optics.nottingham.ac.uk/wiki/Talks_2017



“Complex media correction based on single pixel detection and full intensity-phase-polarisation control”

Miguel Preciado
1:00pm Monday 30th October 2017
203 Tower Building
All Welcome

In this talk I will cover diverse topics I have worked in my research career in optics and photonics, with a focus on complex media correction.

In the first part of the talk I will speak about a proposed and demonstrated technique for the correction of complex media propagation applied to a multimode fiber, by the use of combined single pixel imaging with of kHz spatial light modulation, with full control of intensity, phase and polarization in the output fiber facet.

In the second part of the talk I will briefly summarise some other research topics I have covered during my research career, ranging (1) complex photonics structures design for all-optical pulse processing, (2) compensating wavefronts for overcoming media losses and its application in microscopy, and most recently (3) multi-aperture infrared imaging systems for computational super-resolution, 3D integral imaging (light field imaging), and multispectral imaging.