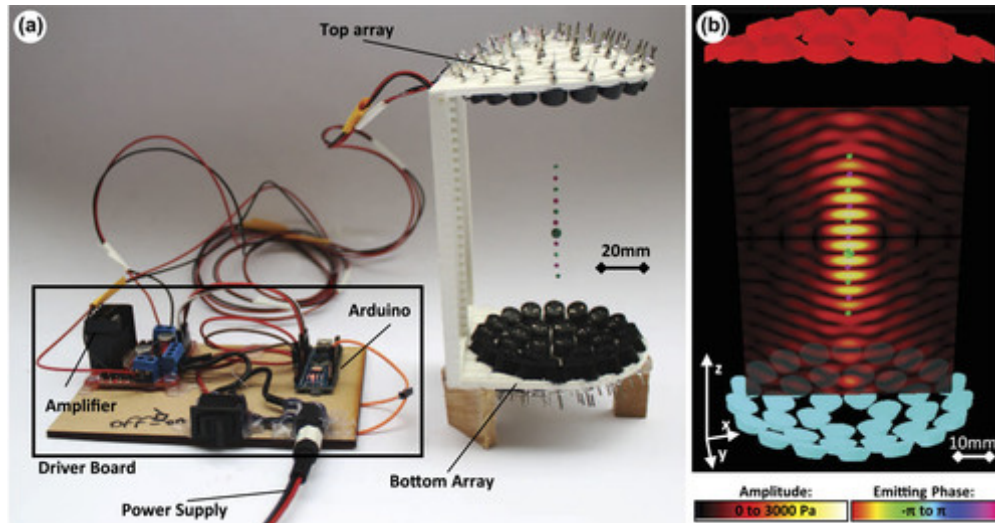


Optics and Photonics Group
Lunchtime Seminar
“An introduction to low
cost acoustic levitation
and manipulation”

Luke Cox

Faculty of Engineering, University of Bristol



1:00pm Wednesday 13th February 2019
203 Tower building
All Welcome

http://optics.nottingham.ac.uk/wiki/Talks_2019



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Acoustic manipulation- using sound energy to remotely trap and move objects- was first demonstrated in 1866 and as long ago as 1985 it was being used by NASA in space. However, with the advent of new technologies and approaches the cost to produce the devices has been slashed from many thousands to less than a hundred pounds. Despite this, the functionality has increased significantly and one-sided acoustic manipulation has been achieved for the first time. This talk is an introduction to the basic principles and the benefits of acoustic levitation, which has been applied for manipulating individual cells right through to levitating centimetre-scale spheres. It will also include interactive demonstrations of low-cost acoustic levitators and tractor beams constructed at the University of Bristol, as well as how to make your own!