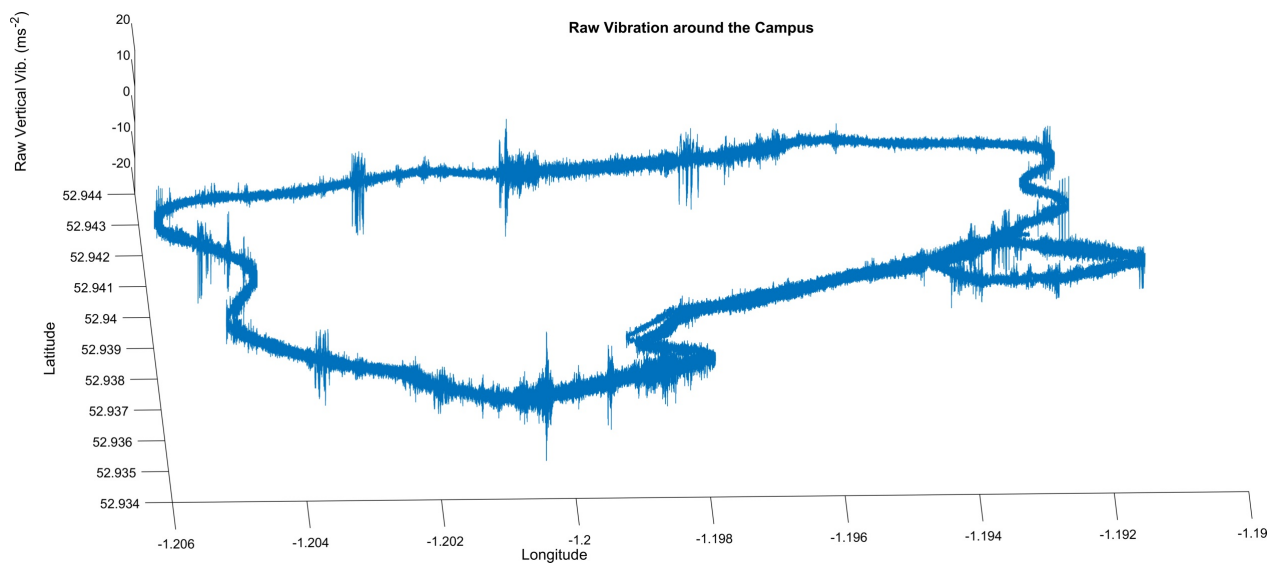


# Optics and Photonics Group Lunchtime Seminar

## “Increasing comfort levels of ambulance journeys”

Thomas Partridge



12:00pm Thursday 22nd June 2017  
203 Tower Building  
All Welcome

[http://optics.nottingham.ac.uk/wiki/Talks\\_2017](http://optics.nottingham.ac.uk/wiki/Talks_2017)

Abstract



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Ambulances carry vulnerable occupants around the country’s network of roads. The most vulnerable of these occupants are preterm neonatal infants being transported between hospitals. Due to poor quality surfaces, many roads are noticeably uncomfortable due to the increased vibrations and this vibration, along with sound, has been shown to lead to medical issues and an increased rate of mortality. By being able to classify road segments by their comfort level, it will be possible to offer a “most comfortable” route option (akin to the “shortest” or “fastest” options currently offered by satellite navigation). As standard road assessment is both slow and expensive, the feasibility of crowdsourcing road vibration data quickly and cheaply utilising the sensors found in common smartphones is investigated.