

Spring  
2024

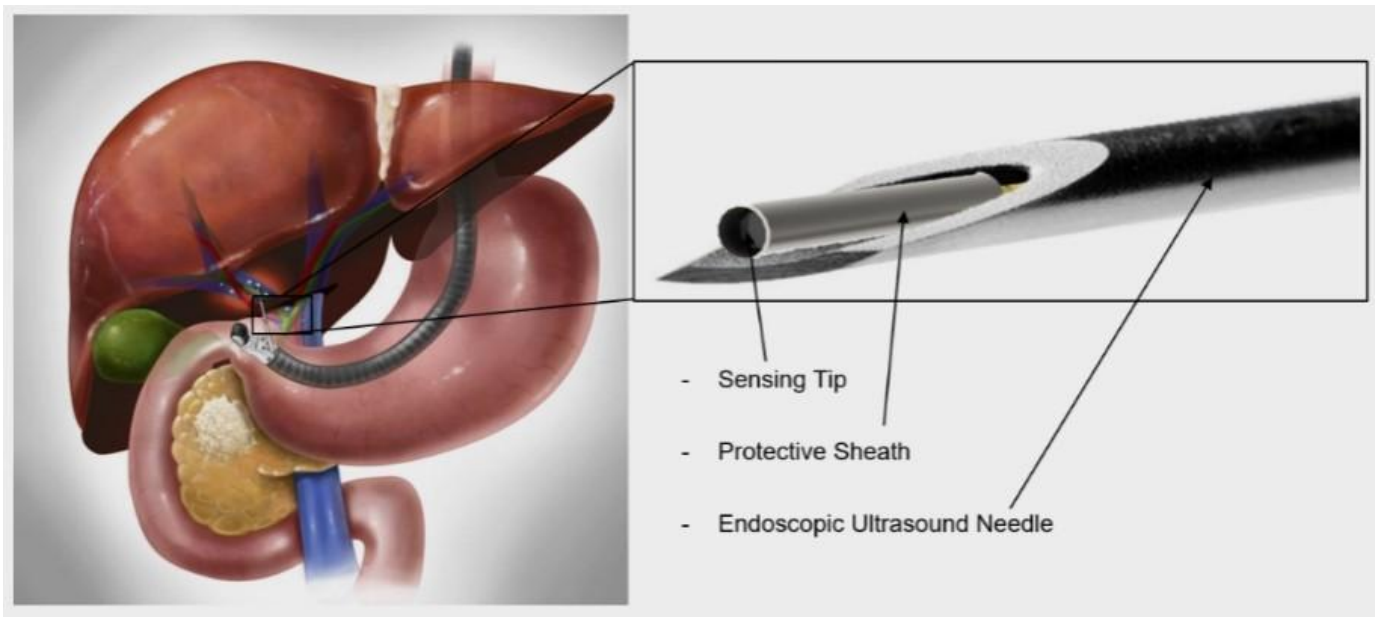
# Optics & Photonics Group Lunchtime Seminar Series

University of Nottingham

## Optical Fibre Sensors for Endoscopic Ultrasound

Adam Garon

*University of Nottingham*



13:30 Wednesday 14 February 2024

Pope Building - C16



**OPTICS &  
PHOTONICS**  
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Adam  
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# Optical Fibre Sensors for Endoscopic Ultrasound

Pancreatic Cancer and portal hypertension are amongst many gastrointestinal disorders that are often late identified, and potentially life-threatening. This work details the development of two optical fibre sensors for endoscopic ultrasound (EUS) applications, aimed at enhancing GI diagnostics for the disorders mentioned. A fibre-tip localised surface plasmon resonance (LSPR) biosensor is designed for mucin detection in pancreatic cysts to improve cyst stratification for assessment of carcinogenesis risk. A Fabry-Perot interferometer-based pressure sensor is customised for use with an EUS needle, enabling direct measurement of portal venous pressure.

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All are welcome



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