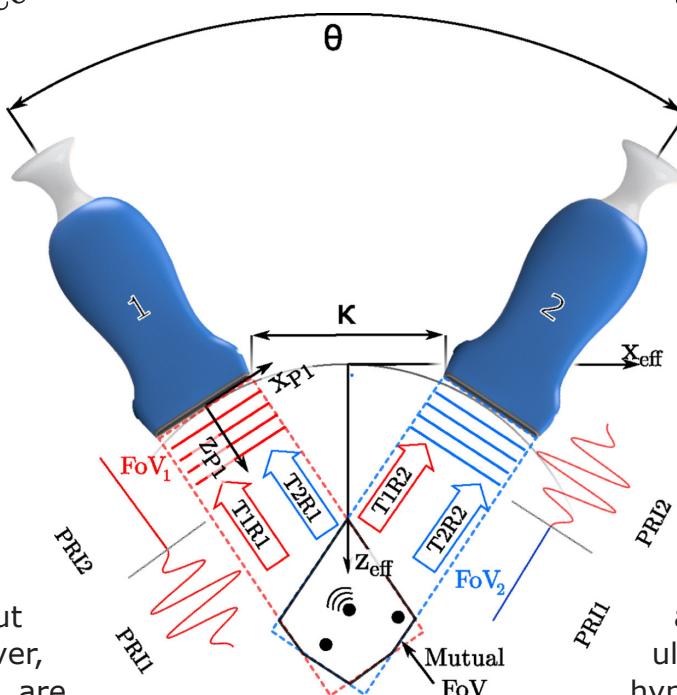


Hyper-aperture Ultrasound: A New Paradigm in Medical Ultrasound

A Joint Meeting with the Institute of Measurement and Control

Ultrasound is one of the most used medical imaging modalities. It is safe, portable and inexpensive, and it provides real-time images without radiation. However, conventional systems are limited by physical constraints leading to low-



resolution images with a restricted field of view and view-dependent artefacts. This lecture will discuss ongoing efforts to advance medical ultrasound via the use of hyper-apertures, a new approach that Dr. Peralta Pereira's group has pioneered.

Dr. Laura Peralta Pereira

Laura Peralta is a civil engineer who holds an MSc in Structural Mechanics and a PhD degree from the University of Granada, Spain. She is currently a Senior Lecturer in Biomedical Engineering at King's College London where she co-leads the Quantitative Ultrasound Imaging and Intervention Lab (QUIINlab).

Her research interests range from fundamental ultrasound studies to clinical applications, including ultrasound propagation in complex media, beamforming methods, quantitative ultrasound and tissue characterization. She was awarded the Wellcome/EPSRC Centre for Medical Engineering Research Fellowship in 2021, and since 2022, she holds a Royal Society University Research Fellowship.

Wednesday, 25 February 2026
Refreshments: 6pm
Lecture starts: 7pm

**Lindop Building
College Lane
University of Hertfordshire
Hatfield
Herts
AL10 9AB**

This event is free, but please book to ensure your place is reserved!
For further information and to book please contact Liyana Aini.
liyanaaini@gmail.com

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