

# AFPAC Programme

Friday 23 January 2026

9:00 AM - 9:30 AM	<b>Invited Speaker: Elly Martin</b> , University College London Transcranial ultrasound for spatially-precise modulation of the deep brain
9:30 AM - 11:10 AM	<b>Morning Session 7</b> <b>9:30 AM - 9:42 AM Xuan Li</b> , University of Southampton A miniature ultrasonic surgical device based on a flexensional configuration with a pre-stressed PZT stack <b>9:42 AM - 9:54 AM Faraz Amini</b> A Cymbal Transducer as a Single Element Device for Enhanced Cavitation Generation <b>9:54 AM - 10:06 AM James An</b> Measurement of Fracture Parameters from Ultrasound Images Using Convolutional Neural Networks <b>10:06 AM - 10:18 AM Alexandr Kiyashko</b> Assessing the Variability of Textured Piezoceramics: Comparison with Hard Piezoceramics for High-Power Ultrasonic Applications <b>10:18 AM - 10:30 AM Liuyu Chang</b> A Piecewise Random Walk Model for Hydrogen-Induced Cracks <b>10:30 AM - 10:42 AM Matt Chandler</b> , CFMS Bounce: An HPC-scale elastodynamic finite element solver for ultrasonic non-destructive testing applications <b>10:42 AM - 10:54 AM Hasan Koruk</b> , National Physical Laboratory Estimation of phase response and uncertainty in ultrasonic hydrophones
11:10 AM - 11:30 AM	<b>Morning Break</b>
11:30 AM - 1:00 PM	<b>Morning Session 8</b> <b>11:30 AM - 11:42 PM Ben Cox</b> , University College London Fourier-Neumann Numerical Models of Acoustic Propagation <b>11:42 AM - 11:54 PM Philippe Lasaygues</b> , Cnrs-Ima Insights into a multi-frequency coded excitation method for enhanced morphometric ultrasound computed tomography <b>11:54 AM - 12:06 PM Oscar Bates</b> , Imperial College London Skull template registration from acoustic data by manifold optimisation and full-waveform inversion <b>12:06 AM - 12:18 PM Arthur Jaccottet</b> , University College London Development of a Capacitive Sensor for Shear Wave Elastography of Prostate Tissue <b>12:18 AM - 12:30 PM Andre Victor Alvarenga</b> , National Physical Laboratory Uncertainty of Shear Wave Speed Measurements in ARFI Ultrasound Elastography <b>12:30 AM - 12:42 PM Romann Fernandes</b> , Greman Insa Cvl Characterization of fonctionnal bio-based polymers for high frequencies medical imaging

	<b>12:42 AM - 12:54 PM Damien Kuntz, Cea List Paris-Saclay</b> Self-adaptive extraction of the geometric and acoustic properties of the skull for transcranial ultrasound imaging
1:00 PM - 1:30 PM	<b>Lunch (grab and go) and Depart</b>