

THE UNIVERSITY of EDINBURGH School of Engineering

IMP Keynote seminar

17th May 2023

G.02, Elm Lecture Theatre

Ultra-precision – enabling our quantum future **Prof Paul Shore**



13:00-14:00

Advancement of precision engineering has enabled many of the everyday products and services we enjoy today. From cars to computers to medical devices, precision engineering has been central to their creation and their advancement. This talk will introduce how precision engineering has formed our modern life, and what drove critical innovations to form it. The role of science advancement as a driver of innovation will be highlighted alongside those of wealth creation and increasingly, humanities quality of life and future sustainability. Paul will illustrate the central role of metrology in making technology advancement. And no doubt as a business owner he will mention the ultra-precision products of the company and suggest why they might have a role to play in our quantum future.

SPEAKER

Dr Paul Shore, FREng, is the CEO of Loxham Precision Limited, an ultraprecision machinery company which span out of the Cranfield University Precision Engineering Centre. Paul was previously the Head of Engineering at the National Physical Laboratory, Professor of Precision Engineering at Cranfield and the Group Head of Precision Engineering at AB SKF in Gothenburg, Sweden. In the late 90's he introduced new manufacturing technology at SKF that now produces 80% of the Worlds wind turbine bearings. In the early 2000's he developed a new mirror manufacturing method and produced the MIRI spectrometer mirrors for the James Webb Space Telescope. In 2020, a Loxham μ 6 machine which he devised manufactured several of the UKs leading quantum devices. Paul is a Fellow of the Royal Academy of Engineering, a past President of the European Society for Precision Engineering and Nanotechnology (EUSPEN) and a biker. He is the author of > 100 papers and numerous patents.