Contribution ID: **7**   Type: **Talk**

Quantum Sensors for the Hidden Sector

Tuesday 9 August 2022 16:52 (3 minutes)

In 2021 the Quantum Sensors for the Hidden Sector (QSHS) collaboration in the UK was founded and received funding to develop and demonstrate quantum devices with the potential to detect hidden sector particles primarily in the μeV to 100 μeV mass window. The collaboration has been developing a range of devices and has started to develop a high-field, low-temperature facility at Sheffield University to characterise and test the devices in a haloscope geometry. Here, I introduce the QSHS collaboration aims and current progress.

Primary authors: BAILEY, Ian (Lancaster University / Cockcroft Institute of Accelerator Science and Technology); Prof. DAW, Ed (Sheffield University); Prof. WITHINGTON, Stafford (Cambridge University); Prof. GREGORI, Gianluca (University of Oxford); Prof. HAO, Ling (National Physical Laboratory); Dr HARDY, Edward (University of Liverpool); Dr LAIRD, Edward (Lancaster University); Dr LEEK, Peter (University of Oxford); Prof. GALLOP, John (National Physical Laboratory); Prof. MARCH-RUSSELL, John (University of Oxford); Prof. MEESON, Phil (Royal Holloway, University of London); Prof. PASHKIN, Yuri (Lancaster University); Dr ROMANS, Ed (University College London); Prof. SARKAR, Subir (University of Oxford); Dr TAN, Boon-Kok (University of Oxford); Dr WEST, Stephen (Royal Holloway, University of London)

Presenter: BAILEY, Ian (Lancaster University / Cockcroft Institute of Accelerator Science and Technology)

Session Classification: Poster Lightning Talks