# ePIC Silicon Vertex Tracker – Outer Barrel Developments

James Glover

University of Birmingham

Work on the physical structure of the ePIC silicon vertex tracker (SVT) has progressed greatly in the last couple of years. The design and layout have moved away from initial technologies used for the proof-of-concept studies and is evolving to meet the needs of the sensors and services intended for the final detector.

The U.K. has taken on the development and construction of the SVT outer barrel (OB) structure. This comprises of two layers (L3 & L4) of stitched monolithic active pixel sensors (MAPS), customised for use within EIC, to cover large areas and push for higher yields. These layers will be built from staves that consider the service requirements (power, readout, slow-controls, and cooling), sensor/service interconnections (flexible printed circuits, FPCs), and global integration/construction into account.

This talk will present some of the sensor (per stave) and stave (per layer) layout studies being conducted, along with considerations regarding service requirements and global integration/construction.