

Department of Physics

Particle Physics

The Denys Wilkinson Building, Keble Road, Oxford OX1 3RH



Experimental Particle Physics Seminar

at 2.15 pm

<https://cern.zoom.us/j/69856157536?pwd=MjNPZFh5SERsYi9WYmtENnJCdGtaQT09>

Tuesday 18 May 2021

Dr Jamie Boyd
CERN

The FASER Experiment at the CERN LHC: Looking Forward to New Physics

Abstract

The Forward Search Experiment (FASER) is the newest experiment at the LHC, approved in 2019 and recently installed into the CERN LHC complex. It is a small and inexpensive experiment placed 500 meters downstream of the ATLAS interaction point. FASER is designed to capture decays of exotic particles, produced in the very forward region, out of the ATLAS detector acceptance. In addition, FASERnu, a FASER sub-detector, is designed to detect collider neutrinos for the first time and study their properties. This seminar will present the physics prospects, the detector design, and the construction and installation progress of FASER.