Contribution ID: **318** Type: **Talk**

The FASER experiment

Thursday 30 March 2023 14:45 (15 minutes)

FASER, the ForwArd Search ExpeRiment, is an LHC experiment located 480 m downstream of the ATLAS interaction point, along the beam collision axis. FASER and its sub-detector FASERnu have two physics goals: (1) to detect and study TeV-energy neutrinos, the most energetic neutrinos ever detected from a human-made source, and (2) to search for new light and very weakly-interacting particles. FASER was designed, constructed, installed, and commissioned during 2019-2022 and has been taking physics data since the start of LHC Run 3 in July 2022. This talk will present the status of the experiment, including detector design, detector performance, and first physics results from Run 3 data.

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Session Classification: SESSION 7: Searches at Accelerators (CHAIR: Jay Hauser - UCLA)

Track Classification: Dark matter searches at accelerators