

SUSY 2024

Theory meets Experiment

Madrid

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New Physics Results from the FASER Experiment

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FASER, the ForwArd Search ExpeRiment, has successfully taken data at the LHC since the start of Run 3 in 2022. From its unique location along the beam collision axis 480 m from the ATLAS IP, FASER has set leading bounds on dark photon parameter space in the thermal target region and has world-leading sensitivity to many other models of long-lived particles. In this talk, we will give a full status update of the FASER experiment and its latest results, with a particular focus on our very first search for axion-like particles and other multi-photon signatures.

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