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Searching for Sterile Neutrinos with MINOS

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MINOS is a two-detector on-axis experiment based at Fermilab. The NuMI neutrino beam encounters the MINOS Near Detector 1 km downstream before travelling 734 km through the Earth's crust, to reach the Far Detector located at the Soudan Underground Laboratory in Northern Minnesota. By searching for oscillations driven by a large mass splitting, MINOS is sensitive to the existence of sterile neutrinos. This talk will present results of a search for sterile neutrinos that is sensitive to the parameter space suggested by LSND and MiniBooNE. Both charged current numu and neutral current neutrino interactions are analysed in a 3+1 model. This MINOS search for numu disappearance complements other previous experimental searches for sterile neutrinos in the nue appearance channel

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