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Electron-capture Branch of ¹⁰⁰Tc SKY SJUE, ALEJANDRO GAR-CIA, University of Washington, IRSHAD AHMAD, Argonne National Lab, DAN MELCONIAN, Texas A&M University, TOMMI ERONEN, IAIN MOORE, HEIKKI PENTTILA, JUHA AYSTO, University of Jyvaskyla, JYFLTRAP COLLABORATION — We present a measurement of the electron-capture branch of ¹⁰⁰Tc performed at the JYFLTRAP facility in Jyväskylä, Finland. The electron-capture branch of ¹⁰⁰Tc determines the solar neutrino absorption cross section of ¹⁰⁰Mo and provides an important test of nuclear-structure calculations for double-beta decay. We discuss implications of this result for theoretical double-beta decay rates from ¹⁰⁰Mo to the ground and excited states of ¹⁰⁰Ru.

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