

Abstract Submitted
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Construction of an ultra low temperature cryostat at University of Florida¹ P. BHUPATHI, H.C. CHOI, J. CANCINO, Y. LEE, University of Florida, Gainesville, FL 32611-8440 — We designed, constructed and tested an ultra low temperature Cryostat. The cryostat is equipped with an Oxford Kelvinox 400 dilution refrigerator and a copper nuclear demagnetization stage. The nuclear stage consists of 48 moles of copper connected to the mixing chamber through an indium heat switch. The whole system is mounted on a vibration isolated structure and the main pumping lines have various stages of mechanical filters and dampers. An automated melting pressure thermometer (MPT) was built and employed to measure the temperature. Details of design, construction of the cryostat and results of test are discussed.

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