

Abstract Submitted
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DAEdALUS: A New Search for CP Violation in the Neutrino Sector RACHEL CARR, Columbia University, DAEDALUS COLLABORATION — The DAEdALUS experiment offers a novel approach to measuring CP violation in the neutrino sector. The design uses multiple cyclotrons to produce intense beams of neutrinos from the decay-at-rest of pions and muons. Short-baseline muon- to electron-antineutrino oscillations are observed via inverse beta decay in an ultra-large water Cerenkov detector at DUSEL. The experiment's high-statistics, low-background output yields a CP violation sensitivity competitive with that of LBNE. Together, the complementary designs of DAEdALUS and LBNE provide the highest sensitivity of any presently proposed CP violation search.

Rachel Carr
Columbia University

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