Title: EDM Experiments vs TeV-Scale New Physics

Abstract:

Precision measurements of EDMs can probe physics beyond the Standard Model at energies well above the TeV scale. However, certain models of flavor physics together with CP as a fundamental gauge symmetry that is spontaneously broken could make current EDM bounds compatible with TeV-scale new physics. I will discuss how EDM experiments, probes of charged lepton flavor violation, and collider experiments have complementary sensitivity and could collectively help to shed light on the fundamental nature of flavor and CP violation in our universe.