TITLE:

Electric dipole moments as a probe of new physics

ABSTRACT:

I will discuss the theoretical framework for the interpretation of searches of permanent electric dipole moments (EDMs) of the neutron and other systems.

I will discuss the discovery potential and physics reach of these searches, their complementarity in probing new sources of time-reversal violation, and their impact on properties of heavy particles such as the Higgs boson and the top quark, which are being directly probed at the Large Hadron Collider.