

Title: CP-violating moments in (chiral) effective field theory

Abstract: Electric dipole moments of nuclei, atoms, and molecules are sensitive to CP-violating nuclear forces. In this way, low-energy experiments indirectly probe beyond-the-Standard-Model physics at very high scales. However, the interpretation of a potential signal, or lack thereof, is complicated because of the non-perturbative nature of low-energy QCD and the complications of nuclear physics. I will discuss how an effective field theory approach, combining the Standard Model EFT and chiral EFT, can partially overcome these difficulties and what are the remaining obstacles.