

In the search for the electric dipole moment of the electron: Theoretical investigations of BaF

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The search for an electric dipole moment of the electron (eEDM) plays an essential role in the search for physics beyond the Standard Model. In the NL-*e*EDM collaboration we study BaF molecules which experience an enhanced the sensitivity for an eEDM. Molecule specific P,T-odd enhancement factors are crucial in order to extract the eEDM from measurements.

We will present state-of-the-art calculations of these P,T-odd enhancement factors on the relativistic coupled cluster level. In particular we will present a careful analysis of the uncertainties of the theoretical results.