

DAMOP18-2018-020024

Abstract for an Invited Paper
for the DAMOP18 Meeting of
the American Physical Society

Precision dipole measurements in trapped molecular ions: recent results and future prospects

ERIC CORNELL, JILA

The Standard Model of particle physics predicts undetectably small electric dipole moments in fundamental particles. An experimental observation of such a moment would be a compelling signature of new physics. Molecular ions can offer both large internal electric fields and long coherence times, and are thus promising systems for dipole-moment searches. We report on recent results from JILA and prospects for future improvement.