

Abstract Submitted
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Prospects for Testing Standard Model (SM) Extensions with Electron Electric Dipole Moment (EDM) Experiments¹ HARVEY GOULD, JASON M. AMINI², CHARLES T. MUNGER³, LBNL — Split SUSY and other SM extensions with new sources of CP violation allow electron EDMs that approach the present experimental limits. A new generation of laboratory experiments using laser-cooled atoms is expected to push back those limits, further constraining theory or discovering new physics. A demonstration laser-cooled-atom fountain electron EDM experiment operating at LBNL will be described and the EDM sensitivity and immunity to systematics, of a full scale experiment, discussed.

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