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### **Present Status and Future Prospects of EDM Measurements<sup>1</sup>**

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Searches for a permanent electric dipole moment (EDM) began in 1951 with the neutron. Up to the present, many systems, including nuclei, atoms and molecules, have been explored and no evidence for an EDM has been found. The search for the EDM is currently driven by the desire to explain the over-abundance of matter relative to anti-matter in the universe. The dynamical origin of this imbalance, or baryogenesis, is thought to have occurred a few picoseconds after the Big Bang, driven by combined Charge Conjugation-Parity (CP) symmetry violating processes beyond those predicted by the Standard Model (SM) of particle physics. The same CP-violating process at high energies would generate EDM signals many orders of magnitude above the SM prediction. In many scenarios, successful baryogenesis leads to strict lower bounds on the nEDM on the order of our target sensitivity of  $3 \times 10^{-27}$  e-cm. In this talk, I will review the history of EDM measurements and describe the present experimental techniques and physics reaches.

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