

## The Electric Dipole Moment of the Neutron

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Since the 1950's people search for electric dipole moments (EDMs) of fundamental particles. A non-zero value of an EDM would correspond to a manifestation of a broken symmetry at high energies and thus physics beyond the Standard Model of particle physics. Although experimental searches for EDMs are among the most precise measurements in physics, no EDM has been observed so far. In this talk a next generation approach based at the FRM-II neutron source will be discussed. We project to achieve a systematic and statistical limit of  $5 \cdot 10^{-28}$  ecm at  $3\sigma$  confidence level on a competitive time-scale. To achieve this goal, Ramsey's method of separated oscillatory fields is applied to trapped ultra-cold neutrons in vacuum. For the investigation of systematic effects a sophisticated system of various means to control ambient disturbances is currently being set up. An overview of the strategy, main systems for magnetic field control and magnetometry, as well as the current status of the ongoing implementation on site will be shown.