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【321】 The n2EDM experiment - A search for new physics at the precision frontier

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The permanent neutron electric dipole moment (nEDM) is a very sensitive probe for exploring physics beyond the standard model at the low energy frontier, particularly regarding charge-parity (CP) violation. With the ultracold neutron (UCN) source at the Paul Scherrer Institut providing high neutron statistics and the new apparatus, the n2EDM experiment aims to measure the nEDM with a sensitivity an order of magnitude higher than the current best measured limit of $1.8 \times 10^{-26} e \text{ cm}$. This talk will present an overview of the experiment and preliminary results from the first commissioning measurements.

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