

Next-generation nEDM search at PSI

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The next-generation neutron electron dipole moment (EDM) measurement is currently under construction at the Paul Scherrer Institute (PSI), the n2EDM experiment. n2EDM will deliver, at minimum, an order of magnitude better sensitivity as compared to current limits on the neutron EDM. This increased sensitivity on the neutron EDM will provide stringent constraints on time-reversal violating processes and deeply probe physics beyond the Standard Model (BSM).

In this talk, I will present the current status of the experiment, characterizations of critical components, and outline the near future for n2EDM. Furthermore, I will discuss plans to explore quantum systems to improve systematics for a future measurement.

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