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The n2EDM experiment at PSI.

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Electric dipole moments (EDMs) in spin 1/2 particles such as the neutron or the electron are highly sensitive probes for CP violation beyond the Standard Model, which is required in order to fully explain the baryon asymmetry in the universe. n2EDM is an experiment in the commissioning phase at the Paul Scherrer Institute and one leading effort to search for the neutron EDM. The nEDM collaboration set the current limit $|d_n| < 1.8 \times 10^{-26} e$cm (C.L. 90%) in our preceding experiment and now plans to improve it by one order of magnitude. This presentation will provide an overview of the n2EDM experimental concept, based on Ramsey's method of separated oscillating fields, and present the current state of the apparatus. Focusing on the most recent progress, we will in particular report on the characterization and optimization of the experiment's magnetic environment.

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