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**Degaussing and NMR Coil R&D for the nEDM Experiment at TRIUMF** RUSSELL MAMMEI, The University of Winnipeg/TRIUMF, CANADA-JAPAN UCN COLLABORATION COLLABORATION — The TRIUMF nEDM experiment aims to constrain the neutron's electric dipole moment by and order magnitude over the current sensitivity. The experiment employs a magnetically shielded Ramsey Resonance based EDM apparatus employing ultracold neutrons from a spallation based isopure Helium-II UCN source, currently under construction at TRIUMF. In this design, inhomogeneities (gradients) and lack of stability of the applied magnetic fields are expected to be one of the leading sources of systematic errors in the measurement. This presentation will discuss recent R&D efforts toward the development of a magnetic shield degaussing/idealization apparatus, magnetic field generation inside shielded volumes with a focus on employing self-shielded coil geometries, and precision magnetometry.

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