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【388】 An external array of remote magnetometers for the n2EDM experiment

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The n2EDM experiment aims to improve the most accurate measurement of the neutron electric dipole moment (nEDM), which requires a stable and uniform magnetic field.

Our Remote Magnetometer System (RMS) uses 14 Raspberry Pis to continuously measure the magnetic field around the n2EDM experiment. The acquired data can provide real-time information for other subsystems of the experiment. Various methods are explored to identify and interpret magnetic disturbances. To enhance the reliability of this process, we employ COMSOL simulations to examine the effect of the experiment's Active Magnetic Shielding on the measurements of the RMS.

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