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# Search for Space-Time Correlations from the Planck Scale with the Fermilab Holometer

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Measurements are reported of high-frequency cross-spectra of signals from the Fermilab Holometer, a pair of co-located 39-m, high-power Michelson interferometers. The instrument obtains differential position ensitivity to cross-correlated signals far exceeding any previous measurement in a broad frequency band extending to 7.6 MHz, twice the inverse light crossing time of the apparatus. General experimental constraints are placed on parameters of a set of models of universal exotic spatial shear correlations, with a sensitivity that exceeds the Planck-scale holographic information bound of space-time position states by a significant factor.

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