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Walton Green* (awgreen@clemons.edu). *Observability of Wave and Schrodinger Equations on \mathbb{R}^d via Uncertainty Principles*. Preliminary report.

We present a few new observability inequalities for the wave equation and fractional Schrodinger equation on the entire space (\mathbb{R} or \mathbb{R}^d) which are consequences of two uncertainty principles for the Fourier transform: the classical Paneah-Logvinenko-Sereda Theorem and a more recent result by O. Kovrizhkin. We characterize the observable sets in one dimension and give a sufficient condition in higher dimensions. (Received January 29, 2019)