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Michael Goldberg* (goldbem1@ucmail.uc.edu), University of Cincinnati, Department of Mathematical Sciences, 839 Old Chem Hall, Cincinnati, OH 45221-0025. *Dispersive Estimates in \mathbf{R}^3 with Surface-Measure and Lower Dimensional Potentials.*

We prove a dispersive estimate for the linear Schrödinger evolution associated to the operator $H = -\Delta + \mu$, where μ is a compactly supported signed measure in \mathbf{R}^3 with dimension greater than $3/2$. In particular this class includes potentials formed as the product of a bounded function $v(x)$ times the surface measure of a 2-dimensional compact surface $\Sigma \subset \mathbf{R}^3$. The key step makes use of a Fourier restriction estimate due to Burak Erdogan. An extension to unbounded functions $v(x)$ satisfying a local Kato condition follows from arguments developed in collaboration with Marius Beceanu. (Received January 18, 2011)