BURAK ERDOGAN, University of Illinois at Urbana-Champaign Strichartz estimates for Schrodinger equations with large magnetic potentials

We show that the time evolution of the magnetic Schrodinger operator

$$H = -\Delta + i(A \cdot \nabla + \nabla \cdot A) + V$$

in \mathbb{R}^3 satisfies global Strichartz and smoothing estimates under suitable smoothness and decay assumptions on A and V but without any smallness assumptions. We require that zero energy is neither an eigenvalue nor a resonance.

This is a joint work with M. Goldberg and W. Schlag.