1015-35-216   **Atanas Stefanov*** (`stefanov@ku.edu`), 1460, Jayhawk Blvd., Department of Mathematics, The University of Kansas, Lawrence, KS 66045. *Strichartz estimates for first order perturbations of the Schrödinger equation and applications.*

We review recent work on the subject. Strichartz estimates for time dependent, real-valued vector potentials are shown to hold, under appropriate smallness and integrability assumptions on the vector potential. A related result, done in collaboration with Georgiev and Tarulli, is that smoothing-Strichartz estimates hold, provided the vector potential is small and satisfies suitable pointwise decay condition. Applications to the Schrödinger map system and the Maxwell-Schrödinger system will be discussed. (Received February 06, 2006)

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