Shijun Zheng* (shijun@math.sc.edu), Department of Mathematics, University of South Carolina, Columbia, SC 29208. Spectral multipliers for Schrödinger operators.

We prove a sharp spectral multiplier theorem of Mihlin-Hörmander type for Schrödinger operators with potentials in the Kato class. We further show that there is a deep connection between spectral multiplier problem and Strichartz estimates for wave and Schrödinger equations. (Received July 17, 2006)