

Resolvent estimates for Schrödinger operators and their applications to related evolution equations

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Abstract: In this talk we survey some basic problems of Schrödinger equations and wave equations in the frame work of general scattering theory. Our approach is classical. It is based on the time independent weighted energy identities. Under suitable decay and/or smallness conditions on the magnetic field and external potential, the following topics are treated: Growth estimates of generalized eigenfunctions, Resolvent estimates, Smoothing properties, Spectral representations, and Scattering theory.