

Meeting: 1000, Albuquerque, New Mexico, SS 12A, Special Session on Regularity in PDEs and Harmonic Analysis

1000-35-70 **Virginia Naibo*** (naibo@math.ukans.edu), Department of Mathematics. Univ. of Kansas., 405 Snow Hall, 1460 Jayhawk Blvd., Lawrence, KS 66045-7523, and **Atanas Stefanov**. *On some Schrödinger and wave equations with time dependent potentials.*

The existence and uniqueness of the initial value problem for Schrödinger and wave equations in the presence of a (large) time dependent potential is studied. The usual Strichartz estimates for such linear evolutions are shown to hold true with optimal assumptions on the potentials. As a byproduct, one obtains a counterexample to the two dimensional double endpoint inhomogeneous Strichartz estimate. (Received August 13, 2004)