SPEAKER: Zhiyuan Zhang, NYU

TITLE: Stability of solitary waves of the NLS equation

ABSTRACT: We consider the asymptotic stability of the solitary waves of 1D NLS equations, under the assumption that the linearized operator is generic (no endpoint resonance) and has no internal modes. Moreover, we also consider the 1D nonlinear Klein-Gordon equation with a potential, and give a result on small data existence. The method of analysis is based on the distorted Fourier transform. This is joint work with P. Germain and F. Pusateri.