Analysis and Applied Mathematics Seminar

Dynamics of the focusing energy critical wave equations

Hao Jia (University of Chicago)

Abstract: In this talk, I will firstly give an overview of significant developments in the study of focusing energy critical wave equations, with emphasis on characterizing Type II, i.e., bounded solutions. The central question considered will be the soliton resolution conjecture which predicts that all Type II solutions will asymptotically decouple into a sum of traveling waves, plus a radiation term in the global case or a regular term in the finite blow up case. A very recent proof of this conjecture for a sequence of times will be sketched. The proof is based on joint works with Duyckaerts, Kenig and Merle.

Monday, January 25 at 4:00 PM in SEO 636