

UC Berkeley

Analysis and PDE Seminar

Nonlinear Schrödinger equations at non-conserved critical regularity

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We consider a class of defocusing nonlinear Schrödinger equations for which the power of the nonlinearity is neither mass-critical nor energy-critical. Following the concentration compactness approach to induction on energy, we show that any solution that remains bounded in the critical Sobolev space must be global scatter. Key ingredients include long-time Strichartz estimates and frequency-localized Morawetz estimates.

Monday, September 15

4:10–5pm, 740 Evans Hall