

Mentor Lecture Series

Organizer: Daniel Erman and Bianca Viray

Monday, 4:10–5:00pm, 60 Evans

Feb. 13 **Daniel Tartaru**, UCB

Nonlinear Dispersive Equations

Nonlinear dispersive equations model many physical phenomena from general relativity to elasticity and quantum mechanics. Their common feature is the propagating wave structure. In their free state, waves would spread out and decay. However, nonlinear interactions lead to many interesting phenomena ranging from focusing to blow-up and to soliton creation. In the talk I will try to give a brief introduction to this broad subject.

The Mentor Lecture Series is designed for first and second year graduate students. The series aims to acquaint beginning graduate students with potential dissertation supervisors whom they might not otherwise closely encounter, and to impart a taste of research activity in the mathematics department in order to help beginning students choose fields of specialization.