

Four Tales of Mathematical Physics

Monday 9 April 2018 12:00 (1h 15m)

What does it mean for a partial differential equation (PDE) or system of PDEs to be integrable? Is there a way to measure how “nonintegrable” a model might be? We shall discuss four results in fluid dynamics and gravitation aimed at answering these questions. Our discussion will reveal rich interconnections between nonlinear waves, astrophysics, combinatorics, geometric analysis, and algebraic geometry.

Presenter: BEHESHTI, Shabnam (Queen Mary)