PHYSICAL MATH SEMINAR

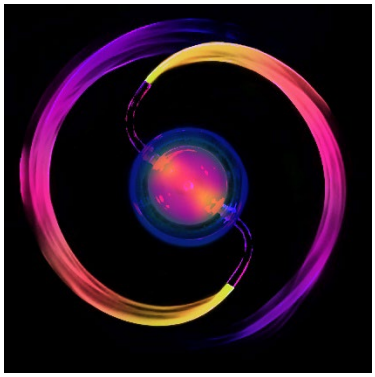
The Feynman Sprinkler Problem

Leif Ristroph

CIMS, NYU

ABSTRACT:

New York University's Courant Institute, Applied Math Lab



Flows with inertia are not reversible, a fact that has many surprising consequences and practical applications. I'll discuss several curious cases and mainly focus on the infamous reverse sprinkler problem that attracted great scientists like Mach and Feynman. The problem has stubbornly resisted an answer for 140 years and left a literature full of contradictory observations, conflicting predictions, and passionate disagreements. I'll talk about what our precision experiments tell us and how math modeling and flow simulations are helping to make sense of the results. Our first findings were recently published (https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.132.044003) but there is much more to do.

TUESDAY, FEBRUARY 25, 2025

2:30 PM – 3:30 PM

Building 2, Room 361

**Note change in location*

MIT MATHEMATICS

https://math.mit.edu/pms/