



Physics Colloquium

Friday March 22nd, 2013
4:10 - 5:00 pm, EPS108

Turbulence, are transport models possible or necessary?

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Abstract:

It is said that turbulence is the last important unsolved problem of classical physics. But what is the problem? Why is it so difficult to solve? And why work so hard to solve it? With ever increasing computational capabilities, is it possible that the problem will be bypassed before being solved? I will suggest that while advances in computational capabilities may in the next decades allow fundamental advances, understanding, not raw computer power, will remain the essential solution ingredient well into the foreseeable future. I will focus in detail on recent efforts that employ mixed Eulerian/Lagrangian statistics to model scalar transport in a simple analog flow, that of a collection of point vortices, and map a possible way to extend those methods to more realistic turbulent flows.

Host:

Philip Judge

**Refreshments 3:45 p.m.
EPS 2nd Floor Atrium**