The Oregon Distinguished Math Lectures for Students
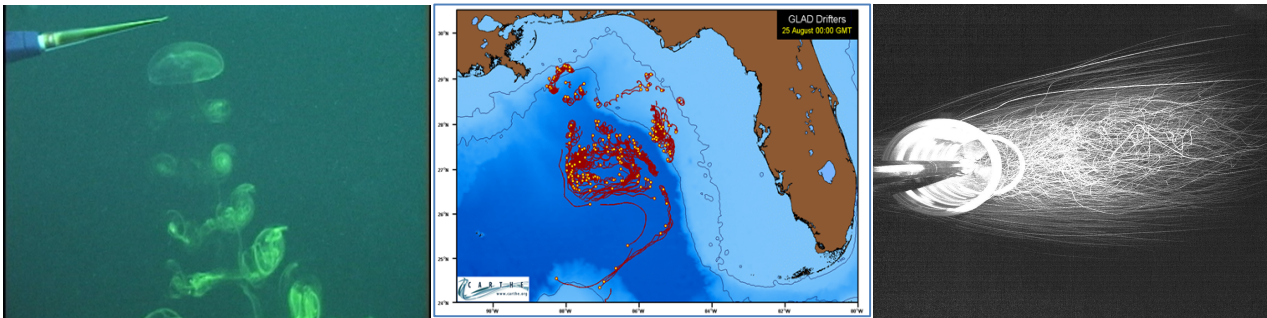
Lectures by mathematicians for undergraduates

(and anyone else who wants to have fun learning math)

Jellyfish, Wind Turbines, and Turbulence:

Dealing with Data Extremes in Complex Flows

John Dabiri (Stanford University)

Tuesday, April 4, 2017, 5:15-6:15 PM, Willamette 100

Our ability to predict important phenomena such as ocean climate change, cardiovascular health, or the performance of a jet engine requires a set of mathematical tools to describe complex fluid dynamics. In practice, we're often faced with a Goldilocks problem: we have either too much data arising from observations of those flows or too little data. In this talk we'll explore new tools from Lagrangian fluid dynamics, differential calculus, and graph theory that allow us to navigate both data extremes and ultimately to optimize important flow physics.

Recognition for Dabiri's innovative work includes his being named a MacArthur ("Genius Grant") Fellow, a PECASE winner, and one of Popular Science's "Brilliant 10."

All are welcome at this talk. For details about this and other upcoming talks, see http://blogs.uoregon.edu/mathisawesome