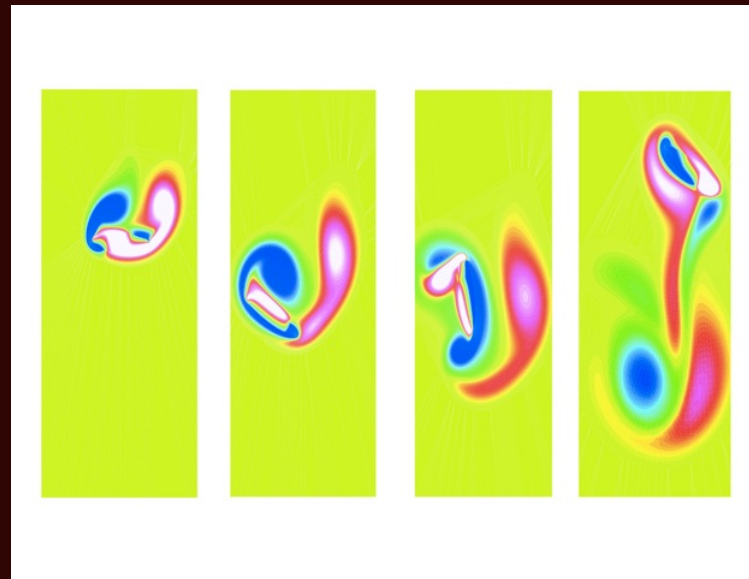


The Reese T. Prosser Mathematics Lecture Series

Presents

# FALLING PAPER AND INSECT FLIGHT



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Aerospace Engineering,  
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Much of my work is driven by a fascination with insect flight: how do insects fly, why do they fly the way they do, and what might we infer about their `thoughts' from their flight dynamics? These questions are a part of a broader inquiry, 'Why does a living organism move the way it does?' The organism's movement is in part dictated by physics, and in part by the organism's response to its own movement.

I will describe how we started from physical principles, solving the governing equations for flow around a flapping wing, studied a piece of falling paper, and gradually moved toward deducing an insect's internal machinery that orchestrate its flight.

**Wednesday, November 5, 2014**  
**7:00 – 8:00 PM**  
**Filene Auditorium, Moore Hall**

*Free and open to the public.*

The Reese Prosser Memorial Lectures were inaugurated in 2002 by the Department of Mathematics at Dartmouth College to honor their long time colleague Reese Prosser. This lecture series, endowed by the late Nancy Prosser and her family, is intended to introduce the general public to mathematical research related to their daily lives.