



MATHEMATICS OF PLANET EARTH 2013  
CROSS-CANADA LECTURE SERIES



# JANE WANG

CORNELL UNIVERSITY

## MOVEMENT, MUSIC, AND MATHEMATICS OF **Falling Paper and Insect Flight**

June 21, 2013 • 3:30 p.m.

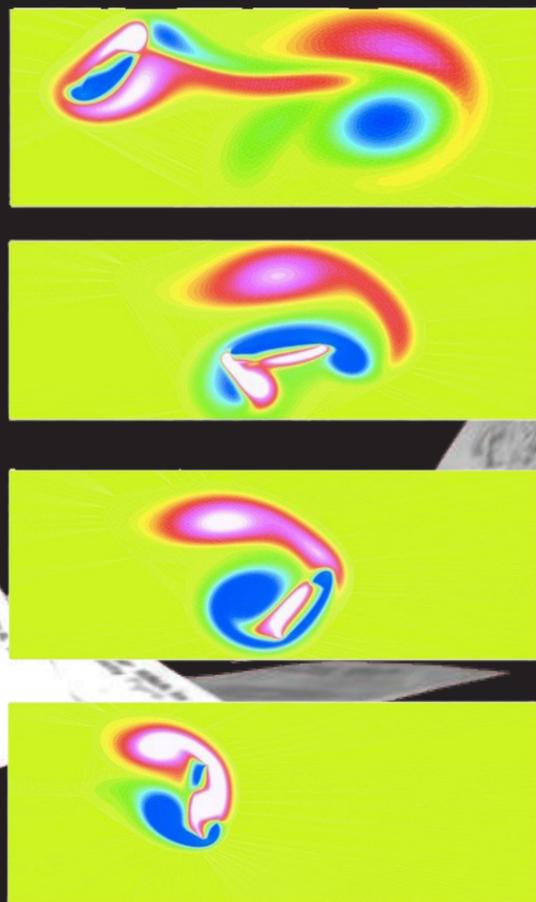
FIELDS INSTITUTE, 222 COLLEGE STREET, TORONTO

In this public lecture, Jane Wang will explore the connection between two themes:

1. Understanding nature's solutions to the Navier-Stokes (fluid dynamics) equations for locomotion
2. Understanding our own response to the poetic movement of falling and flying objects.

The talk will start with a music dialogue between the rhythm of falling paper and the sounds of a prepared piano. Jane will then discuss puzzles and mathematics about the dynamics of falling paper and the tricks used by insects to fly.

The music piece will be performed together with pianist Annie Lewandowski. Both the talk and the performance will be improvised in response to the atrium space in the Fields Institute.



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