Harvey Mudd College 2012 MICHAEL MOODY LECTURE SERIES

Hosted by the Harvey Mudd College Department of Mathematics



FRIDAY March 23 2012

7:00 PM

GALILEO LECTURE HALL

The lecture is free and open to the public.

The Mathematics of Strings, Spaghetti and Splashes

Andrew Belmonte

Penn State University

If, as Galileo said, the book of the universe is written in the language of mathematics, it is also true that many new chapters in the book of mathematics have been inspired by nature. I will explore this connection through several puzzles from the ordinary experiences of everyday life: Why is it difficult to break dry spaghetti in half? Why do things like extension cords, shoe laces and earbuds always get tangled up in knots? How does a falling droplet splash onto the floor? In each case, careful experimentation leads to mathematical answers, generating interesting new questions in the process.



Andrew Belmonte has long worked at the intersection of mathematics and the world to which it can be applied. He received his Ph.D. in physics at Princeton University (1994), and was awarded a Chateaubriand Fellowship and an NSF International Fellowship to study at the Institut Non-Lineaire de Nice in France for two years, after which he was a postdoc at

HARVEY

Dessert and refreshments will follow the talk.



For more information, contact Francis Su, su@math.hmc.edu.

www.math.hmc.edu/moodylectures/

The Michael Moody Lecture Series illuminates the joy, wonder and applicability of mathematics. The HMC Mathematics Department established this series to honor Michael Moody, colleague, chair and honorary HMC alumnus, whose vision and leadership guided the department to national prominence.