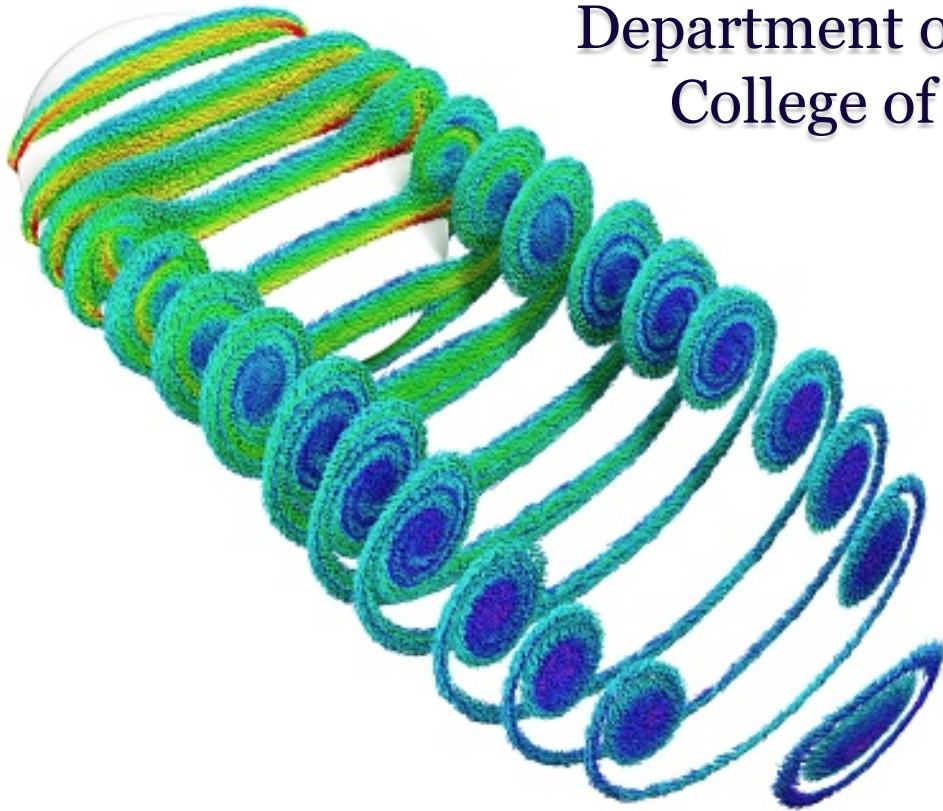


UCCS MATH COLLOQUIUM LECTURE

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Integrable Curve Flows:
the solitary travels of a vortex
filament

The Vortex Filament Equation, describing the self-induced motion of a vortex filament in an ideal fluid, is a simple but important example of integrable curve dynamics. Its connection with the cubing focusing Nonlinear Schrodinger equation through the well-known Hasimoto map allows the use of many of the tools of soliton theory to study properties of its solutions. I will discuss the construction of knotted solutions, their dynamics, and their stability properties.

<http://www.uccs.edu/math/math-events/colloquium-series.html>

Thursday, October 2, 2014
12:30-1:30pm
(refreshments at 12:15pm)
UC 116A