



McMaster University



University of Toronto



University of Waterloo

# THE FIELDS INSTITUTE FOR RESEARCH IN MATHEMATICAL SCIENCES

## SEMINAR SERIES ON CONTROL THEORY

**SPEAKER:**

**RON PERLINE**  
**Drexel**

On the Topic:

### **"Elastic Curves, 3D Filaments and the Hasimoto Transformation"**

The purpose of this talk is to discuss a certain variational problem (elastic energy for curves), two dynamical problems, (the 3D filament equation and the cubic Schrodinger equation), and the relations between them. The crucial transformation, due to Hasimoto, will be interpreted in the context of Poisson geometry.

**Thursday, April 30, 1992 at 3:30pm, room 3018**

**at**

**The Fields Institute**

**(Uni-Park 3, 185 Columbia Street West, Waterloo)**