## **Applied Mathematics Seminar**

## Friday's, 3-4 pm, in DON 2159

You are cordially invited to attend the Applied Mathematics Seminar series.

In the Fall 2012 semester, the seminar series will focus on geometry and symmetry based numerical methods including:

- 1. Discrete Exterior Calculus (DEC)
- 2. Finite Element Exterior Calculus (FEEC)
- 3. Geometric Mechanics
- 4. Variational Integrators

and applications in:

- 1. Fluids and Elasticity
- 2. Bioengineering
- 3. Material Science
- 4. Topological Data Analysis

The series will cover topics from current research in the above areas. Each topic will be covered by a series of one to three seminars.

## The first meeting will be Friday, October 26, 3-4pm, in DON 2159.

Edmond Rusjan will present a short (30 min) talk on Optimizing DEC.

This will be followed by questions and an informal discussion of DEC, FEEC and other topics of interest in the seminar and the organization of the seminar.