



McMaster University



University of Toronto



University of Waterloo

**THE FIELDS INSTITUTE  
FOR RESEARCH IN MATHEMATICAL SCIENCES**

**SEMINAR SERIES ON CONTROL THEORY**

**SPEAKER:**

**GEORGE WILKENS  
Visiting Scientist, Fields Institute  
(University of Hawaii)**

On the Topic

**"Centro-affine plane curves and feedback control"**

will be held

**Wednesday, February 5th, 1992 at 1:30 p.m.**

at

**Fields Institute  
3rd Floor, Uni-Park 3  
185 Columbia Street West  
Waterloo**

I intend to develop the geometry of plane curves under the action of the general linear group,  $GL(2, \mathbb{R})$ . The key invariants will be centro-affine "arc-length" and "curvature". I will then show how centro-affine geometry occurs in the problem of feedback equivalence and explicitly show how the "arc-length" and "curvature" invariants appear in the lowest dimensional case of feedback equivalence.