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## DEPARTMENT OF APPLIED MATHEMATICS APPLIED SEMINAR SERIES 2007

*The Seminar Series of the Department of Applied Mathematics, UNSW, Sydney is dedicated to the announcement, dissemination and discussion of research in mathematics and its applications. A fundamental aim of the Seminar Series is to feature lectures that inform in a manner that makes the subject accessible to the audience, including non-specialists.*

**SPEAKER:** Professor Wieslaw Krawcewicz, Department of Mathematical and Statistical Sciences, University of Alberta, Canada. [krawcewicz@shaw.ca](mailto:krawcewicz@shaw.ca)

**TITLE:** From Brouwer degree to twisted equivariant degree

**Abstract:** In my talk I will explain the idea of the Brouwer degree and the ways it may be applied to differential equations. In order to analyze a Hopf bifurcation problem by means of degree theory, one needs to apply the  $S^1$ -equivariant degree with one free parameter. This degree can be extended to the so-called one parameter twisted equivariant degree, which allows a full classification of a symmetric Hopf bifurcation. I will present some examples.

**TIME AND VENUE:** 2pm, Thursday 22 March 2007, Room 4082, Red Centre.



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