## Poster Project • Models of Nonlinearity (math 990) • Fin de Semester Activity

This term, two applied math grad classes will conclude with a special project that is presented as a poster. Each student will choose a topic of personal interest, with the only restriction that the work done fits within the philosophy of this course. The poster will be formally presented at a public poster session (tentatively, 11 April) where students and faculty will be invited for the viewing. During this time, students will accompany the poster to provide additional explanation. It is planned that the posters will remain on display for a short period of time thereafter (without accompaniment).

The aim of the poster is to communicate results from the study of a nonlinear model. The work must involve two parts: nonlinear analysis or modelling, and computation. The only exception to the computing part of the Math\_990 poster applies to students who are in Professor Kropinski's class and plan to present computational work for their Math\_920 Poster. The poster itself should be 10 pages – variances must be requested in advance.

Possible topics can be extensions or variations of ideas presented in the lectures, or a topic of relevance to the student's research interests. The topic and research plan MUST be approved beforehand. I will be happy work with you to formulate a research plan that is suitable for this poster – meet with me prior to the first deadline. Deadlines for the poster are:

- 19 March submission and approval of research plan
- 02 April presentation (in my office) of basic results, and sketch of 10 page poster
- 11 April poster session

The research plan should be a one-paragraph description of the model and associated computation. At least three references must be attached. The basic results need only be presented in rough draft form (with evidence of a working computation), as well as a complete outline of the 10 pages of the poster. The finished poster must be in large font suitable for public display, with fully labelled figures.