

TEMPLE UNIVERSITY
Department of Mathematics

Applied Mathematics and Scientific Computing Seminar

Room 617 Wachman Hall

Wednesday, 3 November 2010, 4:00 p.m.
(tea at 3:45)

Using numerical models to evaluate impact on and recovery of environmental systems

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Abstract. Researchers in the Center for Natural Resources Development and Protection have used numerical models to simulate the behaviour of environmental systems, especially those stressed due to pollution. The approach is computationally demanding as the models need to be detailed enough to represent the effects of various factors. In addition, the models are nonlinear, which makes scaling up very challenging. We illustrate the approach in context of oil spills, such as the Exxon Valdez oil spill and the Deep Well Horizon spill.