

Meeting: 1003, Atlanta, Georgia, MAA IPS Y1, MAA Invited Paper Session on Modeling Problems of the Environment

1003-Y1-1487 **Donald E. Miller*** (dmiller@saintmarys.edu). *Modeling the Spread and the Control of Oil Spills.*

Environmental situations, such as those created by oil spills, allow the demonstration of good modeling techniques and a variety of mathematical methods. The fact that few models of spread or clean-up provide reliable solutions, leads to graphical approximation and bounds for solutions. Examples will be given of models that reflect such properties of oil spills as spread, drift and evaporation as well as mechanical, chemical and biological clean-up procedures. (Received October 05, 2004)