1127-62-174 Giray Okten* (okten@math.fsu.edu) and David Mandel. Global Sensitivity Analysis and Model Robustness.

Global sensitivity analysis is a widely used tool for modelers in sciences and engineering, however, it's use in financial modeling has been limited. I will discuss global sensitivity analysis based on Sobol' sensitivity indices, and a novel approach to quantify the robustness of a model using randomized sensitivity indices. I will present some applications to interest rate and weather derivative models. (Received February 02, 2017)