1056-62-329 **Dorin Drignei*** (drignei@oakland.edu), Mathematics and Statistics, Oakland University, Rochester, MI 48309. *Statistical Inference for Computer Models with Multidimensional Output.* Preliminary report.

A computer model, or code, is a computer implementation of a mathematical model underpinned by the physical properties of a phenomenon. Computer models are widely used in scientific investigations in order to gain a deeper understanding into the phenomenon studied. Here we propose new techniques for sensitivity analysis and calibration of expensive computer models with multidimensional output. An example involving vehicle Road Load Acquisition computer model and field data will be used to illustrate the methods. (Received August 29, 2009)