



The Math Colloquium
Department of Mathematics
San José State University



Herbert Lee
UC Santa Cruz
Statistical Modeling
for Computer Simulation Problems
SEPTEMBER 11, 2013, MH320

Abstract: Many modern problems involve computer simulations of physical or social processes. The field of statistics provides a range of tools to help with the design, analysis, and use of computer simulators. This talk will give an overview of these problems and the statistical perspective, with applications ranging from rocket science to hydrology to health care policy. A common statistical goal is to map the computer outputs accurately and efficiently, which requires nonlinear regression modeling plus sequential design methodology. The framework is also expanded to address optimization (global min/max) problems.

Background: Students should have a basic knowledge of statistics; no other background is required.

About the speaker: Herbie Lee received his Ph.D. in statistics from Carnegie Mellon University and is Vice Provost for Academic Affairs and a Professor in the Department of Applied Mathematics and Statistics at UC Santa Cruz. His current research uses statistics to assist in applications with computer simulators, helping with prediction, calibration, and optimization.

SNACKS IN MH331B AT 2:30 PM

TALK STARTS AT 3 PM

For more information, see our full schedule at:

<http://www.math.sjsu.edu/~hsu/colloq/>