The Math/Stats Colloquium
Department of Mathematics and Statistics
San José State University

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Lawrence Livermore National Laboratory

Computing, Exploring, and Tracking Features in Massive Scientific Data

February 5, 2014, MH320

Abstract: We will present a general framework to define, extract, and analyze individual features from scientific data. It consists of two parts: a computing pipeline that transforms data into highly compact, abstract representations; and an interactive analysis environment that extracts features from this meta-representation on-the-fly while providing a user with the ability to track feature evolution and explore various statistical summaries. We will also introduce recent extensions for high-dimensional functions that address emerging challenges in uncertainty quantification as well as large scale experimental data.

Background: No particular background is necessary.

About the speaker: Peer-Timo Bremer is project leader at the Center for Applied Scientific Computing, Lawrence Livermore National Laboratory, and Associate Director for Research at the Center for Extreme Data Management Analysis and Visualization (CEDMAV), Univ. of Utah. His interests include large scale and high dimensional data analysis, visualization, topological techniques, and data management.

Snacks in MH331B at 2:30 pm
Talks start at 3 pm

For more information, see our full schedule at:

`http://www.math.sjsu.edu/~hsu/colloq/`