



SCIENCE at the Edge Seminar



John P. Ralston
Department of Physics and Astronomy
University of Kansas

“How to Find Gold in Data: If Any!”

Abstract: 21st century science faces the problem of too much (!) high-dimensional data to interpret or use effectively. It is a great interdisciplinary "crisis" of the current era. The problem is mathematically deep. It is also an unrecognized outcome of the reductionist approach to science exemplified by 19th century physics, which is obsolete.

Seeking “emergent” subsystems is a new idea to discover patterns of orderly behavior that vast complexity often makes on its own. By abandoning reductionism, the critical concept of ‘what do you mean by a probability’ is freed up to allow progress. We will describe the outcomes, with real-world examples, where anyone can usually find a bit of gold in almost any data.

Friday, November 3
11:30 a.m.- 12:30 p.m.
1400 BPS