

The Math Colloquium Department of Mathematics San José State University



## Luke Oeding

## UC Berkeley

## Tensor decompositions and applications October 31, 2012, MH320

**Abstract:** Multi-dimensional matrices, or tensors, appear in almost every area of science. Tensor decomposition expresses a tensor as a linear combination of simpler tensors. I will explain applications of tensors and their decomposition in Signal Processing and Computer Vision. Then I will describe some of the rich geometry that arrises in the study of tensors.

Background: Students should have taken one semester of linear algebra.

About the speaker: Luke Oeding received his PhD at Texas A&M under the direction of Dr. J.M. Landsberg in 2009. He then spent 2 years in Florence, Italy on an NSF International Postdoctoral Research Fellowship, and is currently a postdoc at UC Berkeley. Outside of math, he enjoys photography and travel.

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/