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 arises 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/