



The Math Colloquium
Department of Mathematics
San José State University



Alina Alt

SGI

An introduction to the math behind PitchFX

OCTOBER 15, 2008, MH320

Abstract: Wanna learn how to pitch like a major league player? Unfortunately you won't learn how to do it by attending this talk. What you *will* learn is how, with the help of some projective geometry, the singular value decomposition, nonlinear optimization algorithms, and a bit of luck, a computer can take video footage and calculate what a Barry Bonds home run does when it leaves his hand. Please join us on Wednesday, and I'll try to explain how math can come in handy when you're watching baseball.

Background: Some familiarity with linear algebra, 3-D geometry, and calculus is required.

About the speaker: From 2004–2008, Alina Alt worked at Sportvision Inc. as the Lead Software Developer on the PitchFX system used for ball tracking in baseball telecasts. She currently works as a Senior Software Developer at SGI. She received her BS in Mathematics from Tel Aviv University in 2001 and her MS in Mathematics from SJSU in 2006.

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/>