The Humboldt State University Department of Mathematics Proudly Presents:

The 53rd Harry S. Kieval Lecture **

Thursday, February 5, 2009 7:30 P.M.

Kate Buchanan Room

Tony DeRose

Pixar Animation Studios

"Math in the Movies"

Film making is undergoing a digital revolution brought on by advances in areas such as computer technology, computational physics, geometry, and approximation theory. Using numerous examples drawn from Pixar's feature films, this talk will provide a behind the scenes look at the role that math plays in the revolution. The lecture will be of interest even to those with no technical background.

HSU is an AA/EO institution.

Disability accommodations may be available from event sponsor at 826-5347

^{**}A lecture on some popular and/or broad aspects of mathematics attractive to undergraduates and the public For More Information go to: http://www.humboldt.edu/~mathdept/HarrySKieval/kl.html

MATHEMATICS DEPARTMENT COLLOQUIUM

Tony DeRose

Pixar Animation Studios

Thursday, February 5, 2009 4:00 P.M. BSS 166

Pre-Colloquium Tea BSS 3rd Floor Open Alcove Area 3:30 P.M.

"Wavelets in Computer Graphics"

Wavelets are an important mathematical tool that has found uses in many scientific and engineering disciplines. They are an important technique for use in computer graphics and the closely related field of image processing. In this talk I'll provide an introduction to the theory of wavelets, and I'll highlight their use to solve a variety of computer graphics problems.

Biographical Background

Tony DeRose is currently a Senior Scientist and lead of the Research Group at Pixar Animation Studios. He received a BS in Physics in from the University of California, Davis, and a Ph.D. in Computer Science from the University of California, Berkeley. From 1986 to 1995 Dr. DeRose was a Professor of Computer Science and Engineering at the University of Washington. In 1998 he was a major contributor to the Oscar winning short film "Geri's game", in 1999 he received the ACM SIGGRAPH Computer Graphics Achievement Award, and in 2006 he received a Scientific and Technical Academy Award for his work on surface representations.