



MATHEMATICS EDUCATION COLLOQUIUM SERIES

at

Suffolk University
Beacon Hill, Boston, Massachusetts

Robert E. Kowalczyk
Adam O. Hausknecht
University of Massachusetts - Dartmouth

*“Invigorate Calculus Learning with Models, Games,
and Digital Images”*

Abstract: As mathematics instructors, we are always searching for new ways to motivate our students' learning of calculus. We strive to change our students from being passive scribes to active learners. We want our students to both physically and mentally take part in the classroom learning process. With modern-day technology, computer software, and digital cameras, it is possible to develop models, games, and mathematical experiments that stimulate student interest in calculus. We have developed a software package that has the capability of importing a digital image or video of some physical phenomenon and using it to generate a set of data for modeling purposes. The software can also be used to design math modeling games or visualizations that help students better understand the underlying concepts of calculus. In our talk, we will demonstrate how to use the software and we'll present a number of mathematical activities that we have used successfully with our calculus students. Our software is free to all and can be downloaded from our web site

<http://www2.umassd.edu/temath>

A new cross-platform Java-based version of our software is currently under development. Our goal is to make it easier for teachers to do real applied mathematics in the classroom and to make mathematics more enjoyable for the first- and second-year mathematics students.

Tuesday, March 28, 2006 - 1:30-2:30PM

Colloquium Tea: 1:00PM

Fenton Building, Room 615

For More Information Contact:
Robert Curtis <robert@livemath.com>
or the Mathematics and Computer Science
Department at Suffolk University:
617.573.8251

Suffolk University
is located on
Beacon Hill in Boston,
Massachusetts to the rear of the
Massachusetts State
Capitol Building

Take the Red Line to Park Street
Parking near campus is *not* easily
available. Some pay lots are available through-
out the Beacon Hill area
<http://www.suffolk.edu/map.html>

Colloquium Series Website: <http://www.distancecalculus.com/mecs/>