

Dr. Arek Goetz
San Francisco State University

Title: University Calculus in the Age of Social Networks, Broadband, and Budget Cuts

Abstract: I will report on my journey on building an internet based system for teaching calculus. Conceived in 2002 while tracking Callanques in South of France, and developed frequently while travelling, today the system is a stable platform for worldwide calculus. The centerpiece of the system are 25 video lectures as well as a learning 24/7 homework forum.

The pre recorded video lectures are currently used in a short term CSU funded project: "Calculus in the New Millennium." In this CSU project colleagues (Hsu, Meredith) and I have the goal to teach at least as effectively and focus more on the group work instead of a traditional in class lecture.

The custom made robotic video camera system (by Slawek Goetz) for tracking a mathematician in the lecture was used in recording calculus lectures, is now used by other faculty, one of whom, Ardila, is teaching the same class at SFSU, and in Bogota, Colombia.

I will share with the audience the joys and major challenges of running a technologically and internet based mathematics course.