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Math Festival for 270 students held in Southern California for the first time

Professor will reveal the math behind the scenes of movie special effects

Berkeley, CA – The **Julia Robinson Mathematics Festival** extends its reach to Southern California as the multi-location educational event takes place at UCLA for the first time on Thursday, April 23, 2009, from 9 am to 3 pm. Fifteen Los Angeles-area schools are sending 270 students, in grades 6-12, to a free one-day event that provides a hands-on learning environment covering a wide variety of math topics. In the morning, students will circulate among activity tables where 42 math professors and high school instructors will engage the kids as they test their skills to figure out the math behind puzzles, games and problems. Students will be rewarded for their creativity and persistence with raffle tickets for prizes. For more event information, please see http://www.curtiscenter.math.ucla.edu/k12.html

The Festival will include lively talks in the afternoon by guest speakers Peggy Otsubo, from Northrop Grumman, and UCLA Math Professor and Disney consultant Joseph Teran (see http://www.math.ucla.edu/~jteran). Dr. Teran will speak on "Mathematics and Visual Effects for Movies, Video Games and Beyond." Peggy Otsubo is a UCLA Mathematics alumna and she has held multiple positions during her 30-year career at Northrop Grumman, where she is a Senior Engineer. Dr. Otsubo will speak about how math is used in her industry.

"Applied mathematics is becoming an indispensable tool for creating movie and video game special effects," according to UCLA Professor Joseph Teran. He says natural phenomena like burning fire, flowing water, etc., are challenging to simulate with the computer without taking the underlying physics into account. In Teran's work as an applied mathematician, he uses the computer to solve equations that will reproduce these phenomena in a controllable way. In a behind-the-scenes look at the role that math now plays on the screen, Teran will describe some of these remarkable results that have been used at Pixar, Walt Disney Animation, and Industrial Lights and Magic to create realistic effects in movies.

Joseph Teran received his PhD from Stanford University in 2005 and his research in scientific computing includes the mathematical modeling of tissues and computational fluid mechanics. In the December 2008 issue of *Discover* magazine, Teran was noted in a list of "20 Under 40" that highlighted "young visionaries who are transforming their fields."

The UCLA-based Festival will take place on Thursday, April 23, 9am-3pm, in the Ackerman Grand Ballroom, in the Ackerman Union**,** (UCLA, 308 Westwood Plaza, Los Angeles, California).

The Julia Robinson Mathematics Festival has been held since 2007 in Northern California locations such as Google Headquarters in Mt. View and Pixar Animation Studios in Emeryville. This year, in addition to the UCLA event, the Festival will also be held at Stanford University on Saturday, May 9, 2009.

The Julia Robinson Mathematics Festival is a unique opportunity to celebrate and share the joys and wonders of math with students. The math festival is named in honor of Julia Robinson (1919-1985; see http://www.agnesscott.edu/lriddle/women/robinson.htm), the Berkeley mathematician who made significant contributions to the solution of Hilbert's Tenth Problem (see http://www.goldenmuseum.com/1612Hilbert_engl.html). Among her accolades, she was awarded a MacArthur Fellowship in 1983.

Festival sponsors include Northrop Grumman Corp., Nancy and Nelson Blachman and the desJardins/Blachman Fund. UCLA's Mathematics Department and Philip C. Curtis Jr. Center for Mathematics and Teaching, and the Institute for Pure and Applied Mathematics are hosting the Festival. The Julia Robinson Mathematics Festival is a program of the Mathematical Sciences Research Institute.