



BAMA

School Year 2008—2009
Join us for a free talk...

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Maria Klawe

Winning Strategies for the PSP Game Lumines



San Jose State University*
Engineering Auditorium, Rm. 189

7:30 pm
Thursday, January 22

Lumines is a Tetris-like game in which 4-block shapes drop one-by-one into a well forming a pile of “rubble” at the bottom. Like Tetris, the goal is to place the 4-blocks so that blocks disappear quickly enough to avoid the top of the rubble overflowing the top of the well. The player can rotate a shape and move it left or right until it hits the rubble. In Lumines each shape is a bi-colored 2 x 2 square. Blocks in the rubble disappear when they are in a 2 x 2 mono-colored square. In Tetris there is a sequence of right and left L-shapes that force the rubble to hit the top of the well no matter how wide or deep the well. This talk shows that for a well of width at least thirteen and height at least eight, there is a strategy for Lumines that never overflows the well.

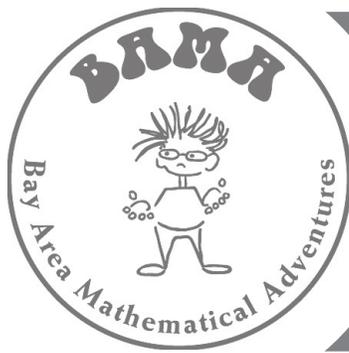
Maria Klawe became president of Harvey Mudd College in July, 2006. Prior to joining HMC, Maria served as Dean of Engineering and a professor of Computer Science at Princeton University and in several positions at the University of British Columbia including Dean of Science and Head of Computer Science. Maria has also worked at IBM Research in California, the University of Toronto and Oakland University. She received her Ph.D. and B.Sc. in Mathematics from the University of Alberta.

Maria has done research in several areas of mathematics and computer science, including functional analysis, discrete mathematics, human-computer interaction and computer games. Maria is a Past President of the Association of Computing Machinery (ACM), Member, and Past Chair of the Board of the Anita Borg Institute for Women and Technology, Trustee of the Mathematical Sciences Research Institute at Berkeley, and member of the Board of Math for America. She is a Fellow of ACM and the Canadian Information Processing Society and the recipient of awards including the Nico Habermann Award and several honorary doctorates.



* See back for map and directions.

Visit the Bay Area Mathematical Adventures (BAMA) at <http://mathematicaladventures.org>



BAMA

Bay Area Mathematical Adventures

A series of presentations on diverse topics by remarkable mathematicians. All talks are free and open to the public.

WHY?

The primary goal of BAMA is to challenge and motivate students to think mathematically. Speakers will present real mathematics, and will share with the audience modern views of mathematics. Some talks will provide students with related problems, or will enable teachers to expand later on the topics with their students.

WHO?

BAMA is aimed at bright high-school age students. However, all are welcome: older students, teachers, parents, and the general public.

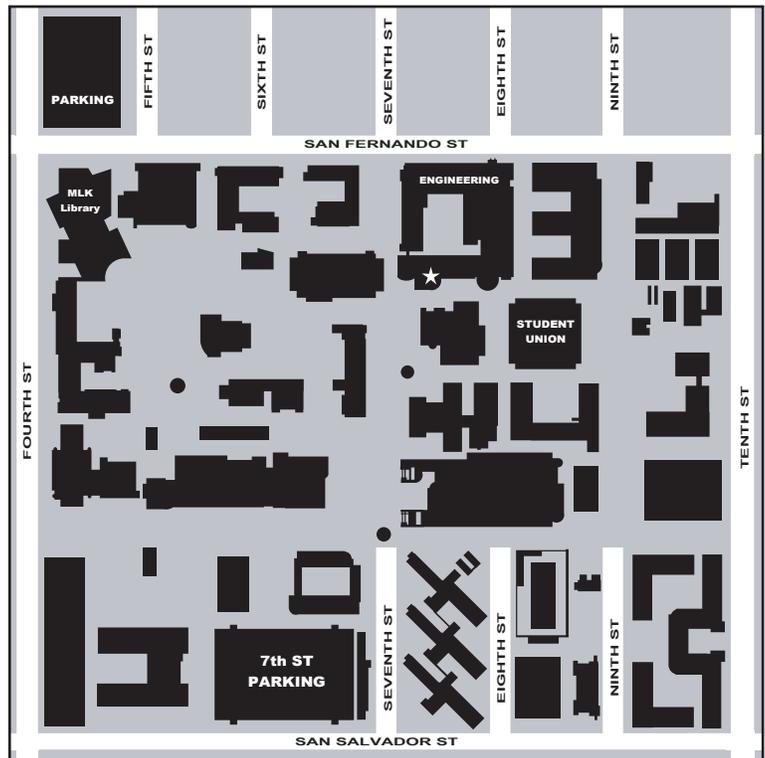
WHEN?

Evening talks will be given approximately once a month between September and April. Each talk will be self-contained (speakers will not assume their audiences have attended previous talks).

WHERE?

San Jose State University Engineering Auditorium 189

- From 101 take the First Street or Guadalupe Expressway exit and go to Fourth Street.
- Take Fourth to San Salvador Street; turn left onto San Salvador and park in the Seventh Street Garage. The automated pay stations located on level 3 and above accept coins, \$1, \$5 and \$10 bills. A 2-hour parking permit costs \$4.
- From 280 take the 7th Street exit and turn North on Seventh St. The garage is on the left after 5 or 6 blocks.
- Convenient parking is also available at the Fourth Street Garage across E. San Fernando St. from the Dr. Martin Luther King, Jr. Library. The first hour after 6:00 pm is free, but otherwise a \$2 flat rate applies to cars entering after 6:00 PM.



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FOR MORE INFO:

<http://www.mathematicaladventures.org>

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