The Math Colloquium
Department of Mathematics
San José State University

Silvia Heubach
CSULA

Analyzing Ellie:
The Story of a Combinatorial Game

May 13, 2009, MH320

Abstract: In this talk I will introduce the game of Ellie, in which two players place L-shaped tiles onto a $2 \times n$ game board until no further moves are possible. The player who can make the last move wins. We ask: For which values of n is there a strategy that allows player 1 to win? How about player 2?

To answer these questions, I will introduce the basic tools to analyze combinatorial games, and tell the story of Ellie. It is the story of finding out that not only did we pick a hard problem, but also one that had already been considered under a different name. I will give you an idea of the research process and describe what we are working on now.

Background: No particular background is necessary. Beginning students are encouraged to attend.

About the speaker: Silvia Heubach received her PhD from USC and is a Professor and the Chair of the Department of Mathematics at CSULA. Her current research is in combinatorics and her book *Combinatorics of Compositions and Words* will be published this summer.

Snacks in MH331B at 2:30 pm
Talk starts at 3 pm

For more information, see our full schedule at:

http://www.math.sjsu.edu/~hsu/colloq/