Brad Jackson
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Universal Cycles of Combinatorial Objects

February 16, 2011, MH320

Abstract: DeBruijn sequences (universal cycles of binary sequences) have a long history in combinatorics. More recently combinatorial mathematicians have become interested in universal cycles of permutations, combinations, partitions, subspaces, etc. In this talk I will show how to construct many examples of universal cycles, using graph theory, symmetry (modular arithmetic), and recursion. I will also talk about many related open problems, and finally, I will dazzle the audience with an amazing display of extra-sensory perception.

Background: Students with a basic introduction to combinatorics and graph theory should be able to understand this talk.

About the speaker: Brad Jackson received his Ph.D. in 1977 from the University of Maryland. He taught briefly at Penn State University and then the University of California, Santa Cruz, before coming to San José State. At the present time he is the Math Department chair as well as the faculty supervisor of the Spartan Juggling Club. His favorite areas of research are combinatorics and graph theory.

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/