## **Bulgarian Nim**

W.H. Chan\*, The Education University of Hong Kong Stephen C. Locke, Florida Atlantic University Richard M. Low, San Jose State University

In this talk, we analyze Bulgarian Nim, a variant of Nim played in the following way: Given k heaps of any number of stones, two players alternate turns to choose one heap and remove at least one stones in that heap. Immediately following a player's turn (and preceding the next player's turn), one stone is removed from each of the existing heaps and this collection of stones is making new heap. The game continues in this way until one player who cannot make a move loses the game. We will also present some preliminary results.

Keywords: Combinatorical game, Nim, Bulgarian Nim