## 1035-05-544 Eric Lars Sundberg\* (sundberg@oxy.edu), 1600 Campus Rd, Los Angeles, CA 90041. Extremal systems for the fair and biased Erdős–Selfridge theorem.

Positional game theory studies combinatorial games of complete information. It is perhaps easiest to think of positional games as generalizations of tic-tac-toe where the game board is an arbitrary hypergraph. A pivotal result in positional game theory is the Erdős–Selfridge theorem which gives simple criteria for when there exists an explicit strategy for the second player to force a draw. We will discuss the extremal systems for the Erdős–Selfridge theorem and its generalization for biased positional games. (Received September 10, 2007)