1047-05-256 **József Balogh** and **Ryan Martin*** (rymartin@iastate.edu), 396 Carver Hall, Department of Mathematics, Iowa State University, Ames, IA 50010. *On Avoider-Enforcer games.*

Positional games are two-player games in which both players have perfect information and alternately choose elements from a set. In the Avoider-Enforcer game on the complete graph K_n, the players (Avoider and Enforcer) each take one edge in turn. Given a graph property $\mathcal{P}$, Enforcer wins the game if Avoider's graph has the property $\mathcal{P}$. An important parameter is $\tau_E(\mathcal{P})$, the smallest integer t such that Enforcer can win the game against any opponent in t rounds.

In this talk, let $\mathcal{F}$ be an arbitrary family of graphs and $\mathcal{P}$ be the property that a member of $\mathcal{F}$ is a subgraph or is an induced subgraph. We determine the asymptotic value of $\tau_E(\mathcal{P})$ when $\mathcal{F}$ contains no bipartite graph and establish that $\tau_E(\mathcal{P}) = o(n^2)$ if $\mathcal{F}$ contains a bipartite graph.

The proof uses the game of JumbleG and Szemerédi's regularity lemma. (Received January 29, 2009)