

Undergraduate Mathematics Colloquium

Fall 2006

East Hall 1324

(Psychology Auditorium)

September 21, 4:10-5:00pm

Quit Work, Play Poker, Sleep till Noon

**(Schooling, Implicit Collusion, and the
Fundamental Theorem of Poker)**

Professor Steven Bleiler

(Portland State University)

Abstract

Ever notice in some "good" poker games how the "weakest" players seem to always come out on top, while the "strong" players do poorly and mutter about how "lucky" their opponents are? This is no accident! There are powerful game theoretic principles at work here, ones that, on the surface at least, appear to contradict Sklansky's famous Fundamental Theorem of Poker. We'll review these principles, exploring a bit of mathematical game theory (which is really not so much about games as it is about making correct decisions) along the way. Then we'll investigate their application, and finally develop the strategic adjustments a good player must make in order to prevail over one's opponents in this environment.