Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Evolutionary Game Theory Analysis of Tumor Progression[1] AMY WU, Princeton University, DAVID LIAO, University of California San Francisco, JAMES STURM, ROBERT AUSTIN, Princeton University — Evolutionary game theory applied to two interacting cell populations can yield quantitative prediction of the future densities of the two cell populations based on the initial interaction terms. We will discuss how in a complex ecology that evolutionary game theory successfully predicts the future densities of strains of stromal and cancer cells (multiple myeloma), and discuss the possible clinical use of such analysis for predicting cancer progression.

[1]Supported by the National Science Foundation and the National Cancer Institute.

Robert Austin
Princeton University

Date submitted: 15 Nov 2013 Electronic form version 1.4