MBS TECHNICAL PAPER 19-01

With potential games; which outcome is better?

SANTIAGO GUISASOLA Instituto Nacional de Matematica Pura e Aplicada Santiago.guisasola@impa.br DONALD G. SAARI University of California, Irvine dsaari@uci.edu

Abstract

Innovation diffusion has been modeled using 1- or 2-dimesional coordination or potential games with two pure Nash equilibria. A concern, which cuts across game theory, is to determine the "better" outcome, where a mystery comes from examples where different measures of a "good" choice disagree. This behavior is explained by using the full 7-dimensional framework for the class of all potential games, which includes coordination games.