

Bayesian Learning Without Common Priors and
Convergence to Nash Equilibria

Yaw Nyarko

ABSTRACT.

Consider an infinitely repeated game where each player is characterized by a "type" which may be unknown to the other players in the game. Suppose that players obey the axioms of Savage (1954): I.e., players have prior probability beliefs over the set of types and actions that will be chosen by all players and maximize their expected utility given these beliefs. Assume also that any event which has probability zero under any one player's beliefs has probability zero under the beliefs of all other players. Suppose further that each player's beliefs about others are independent of that player's type. Then any limit point of beliefs of players about the future of the game conditional on the past lies in the set of Nash equilibria.

Mailing Address:
New York University
269 Mercer St. Rm 723
New York, NY 10003.