Sequential Sampling and Equilibrium [*]

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Abstract

I propose an equilibrium solution concept based on players sequentially sampling to resolve strategic uncertainty — uncertainty with respect to the distribution of choices of the opponents. Players sample from their opponents' distribution of actions at a cost and make optimal choices given their posterior beliefs. The solution concept makes predictions on the joint distribution of players' choices, beliefs and decision times, and generates stochastic choice through the randomness inherent to sampling, without relying on indifference or choice mistakes. It rationalizes well-known deviations from Nash equilibrium as the own-payoff effect as well as observed patterns in beliefs reported and decision times.

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