A Nash folk theorem under an arbitrarily high observation cost

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Abstract

We consider infinitely repeated two-player games with an arbitrarily high observation cost. Each player chooses his action and whether to observe his opponent or not. If he chooses to observe the opponent and pays the observation cost, then he observes the action played by the opponent. Otherwise, he cannot obtain any information about the action chosen by the opponent. We introduce not only public randomizations, but also a correlated signal at the beginning of each stage game (nonpublic randomization). We prove a folk theorem for any level of observation costs on the condition that the discount factor is sufficiently close to one.

Keywords Costly observation; Efficiency; Folk theorem; Private monitoring; Repeated games
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