

On the sustainability of cooperation in games with heterogeneous agents: two economic applications

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Consider a dynamic game in which agents are heterogeneous in the sense that they discount the future at different discount rates of time preference. If agents can cooperate at every instant of time, in order to guarantee the stability of cooperation, weights in the whole coalition should be nonconstant, in general. In this talk, the issue of dynamic consistency (stability of cooperation) is analyzed in two simple models coming from the field of environmental and resource economics: a common property resource model with time-distance nonconstant discounting, and a pollution linear state differential game whose equilibria are state independent.

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