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Topics on Dynamic Games

A game is a mathematical model of conflict or bargaining between rational decision-makers. Game theory is a very active field of research partly because of its intrinsic mathematical beauty, and partly because it has proven to be very useful to understand situations of conflict and cooperation in economics, engineering, ecology, and many other areas. This talk is about dynamic games, that is, games in which the state behaves as a discrete or continuous time, possibly stochastic, dynamical system. We survey results on both cooperative and noncooperative games, and some important special cases such as compromise solutions, bargaining games, zero-sum games, and games against nature, also known as minimax or worst-case control problems.