

Vortragsankündigung

Am **Donnerstag, den 21.11.2019**, hält um **17:00 Uhr**

Vladimir Gaitsgory
(Macquarie University Sydney)

einen Gastvortrag über das Thema

Linear Programming Approach to Long Run Average Optimal Control: The Non-Ergodic Case

Der Vortrag findet im **Raum 3401** in **Gebäude 33** statt.

Vortragszusammenfassung

We will discuss an infinite dimensional linear programming (IDLDP) problem, which along with its dual allow one to characterize the limit optimal values of the infinite time horizon optimal control (OC) problem with time discounting and time averaging criteria. One of the results that we will concentrate on is that establishing that the Abel and Cesaro limits of the optimal value of the OC problem are bounded from above by the optimal value of the IDLP problem and from below by the optimal value of its dual, this implying, in particular, that the Abel and Cesaro limits exist and are equal if there is no duality gap. We will also discuss IDLP based sufficient and necessary optimality conditions for the long-run-average optimal control problem applicable when there is no duality gap. The novelty of our consideration is that it is focused on the general case, when the limit optimal values may depend on initial conditions of the system. The talk is based on results obtained in collaboration with V. Borkar and I. Shvartsman.

Alle Interessierten sind dazu herzlich eingeladen.