

Adriano FESTA: MFG and Traffic: a multilane management problem.

Abstract: In this talk we discuss an Mean Field Games approach to traffic management on multi-lane roads. Such approach is particularly indicated to model self driven vehicles with perfect information of the domain. The mathematical interest of the problem is related to the fact that the system of partial differential equations obtained in this case is not in the classic form, but it consists of two continuity equations (one for each lane) and a variational inequality, coming from the Hamilton-Jacobi theory of the hybrid control.