

# On the master equation in mean field game

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## Abstract

In this talk I will explain how to obtain the existence of the master equation for mean field games with common noise by relatively simple arguments. This equation, which is a transport equation in the space of measures, plays a central role in the theory of optimal control problems with an infinite number of players facing a common random perturbation.

This is a joint work with A. Porretta (Università di Roma Tor Vergata).