Controlled mean-field flows with state constraints

Dan Goreac
Shandong University Weihai, China
and
Université Gustave Eiffel, France
dan.goreac@univ-eiffel.fr

3 août 2022

Résumé

In this talk, we focus on controlled stochastic flows with mean-field dynamics complying with (closed) state restrictions. This property known as (near)-viability is characterized using (quasi-)tangency methods. Law restrictions and mixed state-law restrictions are considered as is the interplay between the two classes. Besides the theoretical issues, specific applications to comparison in the convex order and/or normality will be presented (if the time allows it).