

Geometry and Control

Monday, December 4, 2023 12:40 PM (55 minutes)

Control system is a family of dynamical systems acting on the same state space. The systems in the family do not commute and a clever strategy of switching between them allows to build a desired complicated dynamics from simple blocks. Transformation groups and geometry play a crucial role.

We'll start from simple kinematic models, then discuss universal controllability properties and nice geometric optimal control problems.

This is an expository talk, no particular prerequisites are required.

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