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# BERN-FRIBOURG GRADUATE SEMINAR

a seminar for Master and PhD students

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Thursday 26<sup>th</sup> March, 2026: 16:15 - 17:00

Room 2.52, Pérolles 08, Fribourg

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## Turnpike in optimal control

### **Abstract**

In this talk, I will present the *turnpike* property in optimal control, the phenomenon according to which optimal trajectories remain exponentially close to a static optimal solution for the majority of the time horizon, with deviations occurring only near the initial and terminal times. After introducing the general framework, I will discuss the main theoretical result and illustrate the turnpike effect through several representative examples. The focus of the seminar will be on applications to middle distance running.