Bern-Fribourg Graduate Seminar

a seminar for Master and PhD students

Thursday 16th October, 2025: 16:15 - 17:00

Room B6, Exakte Wissenschaften, Bern

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Decay of Systems of ODEs

Abstract

We (should) all know how to solve a linear system of ODEs of the form x'(t) = Ax(t), but what do we know about its short- and long-time behaviour besides stability? In this talk, I will first present some general bounds for the long-time behaviour of its solutions using the spectrum of A, and, if time permits, show a result about the short-time behaviour in the context of hypocoercivity, as introduced by Cedriv Villani some years ago.