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# Linear inviscid damping for monotone shear flows

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## Abstract

Recently there has been much interest in damping phenomena for kinetic equations following the seminal works of Mouhot-Villani on Landau damping and of Bedrossian-Masmoudi on inviscid damping around Couette flow.

In this talk I present a proof of linear inviscid damping for the 2D Euler equations around general monotone shear flows in the framework of Sobolev regularity. Here I consider both the settings of an infinite periodic and a finite periodic channel with impermeable walls.

In the latter case I explain the non-negligible effect of boundary conditions on the attainable regularity and stability results.

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