

Seminário

22 de Abril, 14h00, Sala 11.1.32

Dynamics of Linear Operators: From Dissipative to Conservative Systems

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Linear Dynamics lies at the intersection of operator theory and dynamical systems. Weighted backward shifts serve as a foundational tool in linear dynamics. Many dynamical characterizations established in the setting of weighted shifts extend naturally to composition operators on L_p spaces over dissipative systems. However, the behavior in the conservative setting remains distinct. In this colloquium talk, we investigate the dynamics of composition operators acting on L_p spaces over conservative systems, demonstrating how they differ markedly from their dissipative counterparts. We will place a particular emphasis on the structural role of odometers in these systems.

Short bio:



Udayan “Dario” Darji is Professor of Mathematics at the University of Louisville, is an internationally recognized scholar, where his research spans on analysis, topology, dynamical systems and related areas, with extensive collaborations across Europe, South America, and Asia. He has held visiting and Fulbright appointments at leading institutions including Charles University in Prague, the University of São Paulo, Eötvös Loránd University in Budapest, and Ashoka University in India. He served as a Fulbright Distinguished Scholar to the Czech Republic (September 2024–July 2025) at Charles University.

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