COMPLEX ANALYSIS, THICK SETS, AND SPECTRAL INEQUALITIES

Michela Egidi

Ruhr-Universität Bochum

April 24, 2023

Spectral inequalities are a crucial ingredient in control theory to obtain controllability properties of certain inhomogeneous parabolic systems. In this talk we will show how a result from complex analysis, the Logvinenko-Sereda Theorem, has become a popular tool to obtain spectral inequalities and we will give a general framework which streamline its proof. This talk is based on joint works with Ivan Veselic (TU Dortmund) and Albrecht Seelmann (TU Dortmund).