Bernoullis Tafelrunde

Math Students and PhD Seminar

Wednesday, 08 October 2025, 12:15 - 13:00
Seminar Room 05.001, Spiegelgasse 5

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The Riemann-Hilbert correspondance and variation of parameters.

Abstract

The Riemann-Hilbert correspondance stated in its abstract form gives an equivalence between local systems on a manifold and vector bundles with connections. This equivalence allows us to have a better understanding of both sides of the equivalence. In this talk, I want to give concrete descriptions of both sides of the equivalence, and to emphasize that one direction of the correspondance can be interpreted as the method of variation of parameters, which is well known for first year students learning to solve non-homogenous linear diffential equations.