Oberseminar Analysis und Theoretische Physik

Prof. Dr. Matthias Lesch

Rheinische Friedrich-Wilhelms-Universität Bonn

The multivariate holomorphic functional calculus: old and new

In this mostly pedagogical talk I will review the history and the results of the multivariate holomorphic functional calculus, which is by no means just a straightforward generalization of the usual one-variable case.

I ran into this when studying the fine print of Connes' Rearrangement Lemma which occurs in the study of the heat trace expansion of the Laplacian on noncommutative spaces. I will also discuss some elementary applications to noncommutative versions of Newton interpolation and Taylor formulas. The decisive tool for all of this is the noncommutative version of the divided difference formalism.

The talk is based on an ongoing project with Luiz Hartmann from Sao Carlos, Brazil.

Dienstag, 29.11.2022, 15:00 Uhr, Raum c311
Hauptgebäude der Leibniz Universität

Dazu laden herzlich ein:
Prof. Dr. Wolfram Bauer, Prof. Dr. Joachim Escher, Prof. Dr. Johannes Lankeit,
Prof. Dr. Elmar Schrohe, Prof. Dr. Christoph Walker