
Seminar des SFB/TRR 326 GAUS

Freitag, 17.10.2025

Dr. Gal Porat

Einstein Institute of Mathematics, Hebrew University of Jerusalem

spricht über das Thema

Solid Locally Analytic Representations in Mixed Characteristic

Locally analytic representations of p -adic Lie groups with \mathbb{Q}_p coefficients are powerful tools in p -adic Hodge theory and the p -adic Langlands program. This perspective reveals important differential structures, such as the Sen and Casimir operators.

A few years ago, Rodrigues Jacinto and Rodriguez Camargo developed a "solid" version of this theory using the language of condensed mathematics, which provides more robust homological tools (comparison theorems, spectral sequences...) for studying these representations.

This talk will present ongoing work that extends this solid theory to a much broader class of mixed characteristic coefficients, such as $F_p((X))$ or $\mathbb{Z}_p[[X]] < p/x >$, as well as semilinear representations. I will conclude by exploring how these ideas relate to mixed characteristic phenomena in p -adic Hodge theory and the Langlands program.

Ort: **INF 205, SR A**

Beginn: **13:30 Uhr**

Alle Interessenten sind herzlich eingeladen.

Prof. Dr. Otmar Venjakob