Department of Mathematics, BGU

AGNT

On *Wednesday, December ,3 2025*

At *14:10 – 15:10*

In *201*

Gal Porat (Weizmann (

will talk about

Solid Locally Analytic Representations in Mixed Characteristic

Abstract: Locally analytic representations of p-adic Lie groups with Q_p coefficients are powerful tools in p-adic Hodge theory and the p-adic Langlands program. This perspective reveals important dffierential 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 work that extends this solid theory to a much broader class of mixed characteristic coefficients, such as F_p((X)) or 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.