

Department of Mathematics, BGU

AGNT

On Wednesday, December ,4 2019

At 15:00 – 16:15

In 101-

Ehud de Shalit (HUJI)

will talk about

The Loxton - van der Poorten conjecture, and an elliptic analogue

Abstract: The conjecture of Loxton and van der Poorten is a criterion for a formal power series to be the expansion at 0 of a rational function, and is related to a famous theorem of Cobham in the theory of finite automata. It was proved by Adamczewski and Bell in 2013. Recently, Schafke and Singer found a novel approach that leads also to a simple conceptual proof of Cobham's theorem. We shall explain these results and the cohomological machinery behind them, and discuss what is missing from the picture to establish an elliptic analogue.