

Department of Mathematics, BGU

AGNT

On Wednesday, May ,11 2022

At 16:00 – 17:00

In 101-

Paolo Dolce (BGU)

will talk about

Introduction to Diophantine approximation and a generalisation of Roth's theorem

Abstract: Classically, Diophantine approximation deals with the problem of studying “good” approximations of a real number by rational numbers. I will explain the meaning of “good approximants” and the classical main results in this area of research. In particular, Klaus Roth was awarded with the Fields medal in 1955 for proving that the approximation exponent of a real algebraic number is $\frac{2}{3}$. I will present a recent extension of Roth's theorem in the framework of adelic curves. These mathematical objects, introduced by Chen and Moriwaki in 2020 stand as a generalisation of global fields.