

Department of Mathematics, BGU

AGNT

On Wednesday, July ,3 2024

At 14:10 – 15:10

In 101-

Ignazio Longhi (University of Turin)

will talk about

Some applications of the profinite completion

Abstract: Many estimates for the “size” of a subset of the natural numbers (a “size” usually expressed by some notion of density) come from “local” conditions, like reduction modulo prime powers. The idea can be formalized in terms of the Haar measure on the profinite completion of \mathbb{Z} or, in a more refined way, via distributions on this profinite ring. This approach can be easily generalized by replacing \mathbb{Z} with the ring of S -integers of any global field. In this talk (based on a number of joint works with L. Demangos and F.M. Saettone), I will discuss how to use these ideas to extend classical results and reformulate long standing conjectures in profinite terms.