

Avviso Seminario

Dipartimento di Matematica e Applicazioni "Renato Caccioppoli"
Università degli Studi di Napoli "Federico II"

Venerdì 8 luglio 2022

Sala professori I livello, h. 10:30

Ayhan Gunaydin

(Boğaziçi University)

"Expanding the Additive Group of Integers by Beatty Sequences"

Abstract: The Beatty Sequence generated by an irrational $r > 1$ is $([nr] : n > 0)$, where $[a]$ denotes the integer part of a real number a . After presenting some properties of such a sequence, we will investigate the expansion of $(\mathbb{Z}, +)$ by the unary subset B consisting of the terms of a Beatty sequence. We will mention a quantifier elimination result and an axiomatization for the theory of such an expansion. If time allows, we will speculate about the expansion of $(\mathbb{Z}, +, <)$ by a Beatty sequence. (Some parts of the talk is joint work with Melissa Özsahakyan.)

La Proponente
Giuseppina Terzo