

Einladung zum Vortrag

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zum Thema

Multiplicative Normality

am Dienstag, 21.03.2017, um 09:00 Uhr, in Raum (IM) SR 033

Abstract

A number (in, say, decimal expansion) is "normal" if every finite block B (of digits) occurs in the expansion with density $10^{-|B|}$. Lebesgue-almost every number is normal. The classical effective example is the Champernowne number $x = 0,1234567891011121314\dots$. We (dynamical systems people) call this property the "additive normality" because it involves the ergodic theorem for the action of the semigroup $(\mathbb{N}, +)$ of additive natural numbers. What happens if this semigroup is replaced by $(\mathbb{N}, *)$, the multiplicative naturals?