



SCUOLA
NORMALE
SUPERIORE
PISA

SEMINARIO DI MATEMATICA

lunedì 29 giugno 2009
ore 14.00

Scuola Normale Superiore
Pisa
(Sala Riunioni, Collegio Puteano)

Dong Han KIM
University of Suwon, Korea

Terrà un seminario dal titolo:

“Return time complexity of Sturmian sequences”

Abstract

The Sturmian sequence has the lowest subword complexity besides periodic sequences.

Let $R_n(x)$ be the recurrence time of initial n -word of an infinite sequence x .

We have that x is periodic if and only if there is M such that $R_n(x) \leq n$ for all $n > M$.

Therefore, for nonperiodic sequences $R_n(x) \leq n + 1$ is the possible lowest upper bound for R_n .

We show that if $R_n(x) \leq n + 1$ for all n , then x is a Sturmian sequence.

In general, the opposite does not hold and we completely classify the such Sturmian sequences.

Tutti gli interessati sono invitati a partecipare.

La Segreteria della
Classe di Scienze