



# Università degli Studi di Palermo

Dipartimento di Matematica e Informatica

*Words and Automata Research Group*

## ANNUNCIO DI SEMINARIO

### **Titolo: Infinite Self-Shuffling Words**

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#### **Abstract:**

An infinite word  $x$ , with values in a finite set  $A$ , is said to be self-shuffling if  $x$  admits factorizations of the form  $x=U_1V_1U_2V_2\dots=U_1U_2\dots=V_1V_2\dots$ . In other words, there exists a shuffle of two copies of  $x$  which produces  $x$ . This property of infinite words is independent of the complexity of the word and is an intrinsic property of the word and not of its language (or set of factors). While the property of being self-shuffling is a relatively strong condition, many important words arising in the area of symbolic dynamics are shown to be self-shuffling. In this talk we will give various examples of self-shuffling words and discuss various applications.

***Tutti gli interessati, in particolare gli studenti, sono invitati a partecipare***