



# Università degli Studi di Palermo

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Dipartimento di Matematica e Informatica

*Words and Automata Research Group*

## SEMINAR ANNOUNCEMENT

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

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Thursday 7th November 2013, 3 p.m.  
Room 7  
Via Archirafi 34, 90123 Palermo

#### **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.

***All interested people, in particular students, are invited to participate.***