Università degli Studi di Palermo

Dipartimento di Matematica e Informatica

Words and Automata Research Group

SEMINAR ANNOUNCEMENT

Title: Random subgroups of a free group and automata

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Tuesday 5th November 2013, 12 a.m.
Room 7
Via Archirafi 34, 90123 Palermo

Abstract:

Let A be a finite alphabet. The free group F(A) is the set of finite reduced words made of letters from A and their (formal) inverses. In this talk we show how one can study with probabilistic and combinatorial methods algebraic properties of a random finitely genrated subgroup of F(A). One of the key tool is the representation of such a subgroup by a special automaton obtained by Stalling's foldings. We shall introduce some combinatorial tools to study quantitatively these special automata. And We shall compare the behaviour of finitely generated random subgroups under some natural probability distributions.

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