Títol: Short Synchronizing Words for Random Automata

Abstract: We prove that a random deterministic finite automaton on n states has a synchronizing word of length $O(n^{1/2} \log n)$ with high probability, confirming conjectures of several authors based on numerical simulations. The best theoretical result prior to this work was the bound $O(n \log^3 n)$ given by Cyril Nicaud. This is joint work with Guillaume Chapuy.