

ATELIER « COMBINATOIRE, RANDOMISATION, ALGORITHMES ET PROBABILITÉS »

4–8 MAI 2009

WORKSHOP “COMBINATORICS, RANDOMIZATION, ALGORITHMS AND PROBABILITY”

MAY 4–8, 2009

Random Graph Intuition in Positional Games

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We survey instances of a surprising phenomenon present in positional games. In the games we study two players alternately take edges of the complete graph and the winner depends on the graph occupied by one of the players : whether it is connected, Hamiltonian, or contains a fixed subgraph H . According to the “andom graph intuition” the result of a game played by two clever players can often be predicted very accurately by playing the same game with random players.