

Main Talks IV Seminar on Categories and Applications Bellaterra, 6 to 9 of June of 2007

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Periodicity of spaces of walks

Abstract: Let W_n be the space of walks on the natural numbers in which one starts at position n, takes one step left or right with every second that passes, and continues forever. It turns out that the sequence (W_n) , taken up to isomorphism, is periodic. This is not an isolated curiosity: many similar examples of periodicity can be found, and there is a general theory of such phenomena. This involves the topology of totally disconnected spaces, the theory of rigs, and a certain class of toposes.

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