Levels of distributional chaos for Turing Machines

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Abstract

A Turing machine can be represented as a dynamic system, consisting of two cells, in which there is an infinite tape and a head that act as pointers to describe a certain sequence around given instructions. In this work, we are going to introduce some levels of distributional chaos with respect some increasing sequences through Furstenberg's Block family.Latter, we'll introduce one example, where the system is DC2 but not DC1.

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