

Initial Segment Complexity for Measures - Results and Open Problems

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Abstract

The initial segment complexity of a measure μ at n is given by the sum over all $\mu(x) * C(x)$ with x of length n for the plain complexity C and similarly for the prefix-free Kolmogorov complexity. This talk gives the basic relations between initial segment complexity and randomness notions and lists out various open questions which arise from this work. The same work was presented at the American Institute of Mathematics in this week's programme on Algorithmic Randomness.

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