

# Factor complexity, automatic numbers, transcendence and Diophantine approximation

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We begin with a survey of results from Diophantine approximation, including Roth's Theorem, the Schmidt Subspace Theorem, and their  $p$ -adic extensions. Then, we prove that any irrational number, whose sequence of decimals has low factor complexity, is transcendental. If time permits, we discuss the analogous result for continued fraction expansions.

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