

Pseudoexponential Fields and Schanuel's Conjecture

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Abstract

This work is motivated by Zilber's conjecture that the pseudoexponential field of size continuum is isomorphic to the classic complex exponential field. We will present various consequences of both this conjecture as well as the weaker Schanuel's conjecture. Results include a proof of the Schanuel Nullstellensatz as well as a proof of a special case of Shapiro's conjecture.

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