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Uniqueness of means in the Cohen model

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Abstract: We investigate the question of whether or not an amenable subgroup of the permutation group on \mathbb{N} can have a unique invariant mean on its action. We extend the work of M. Foreman (1994) and show that in the Cohen model such an amenable group with a unique invariant mean must fail to have slow growth rate and a certain weakened solvability condition.

Keywords: construction scheme; Knaster hierarchy; Cohen reals

AMS Subject Classification: 03E05, 03E35, 03E65

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