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Expansive dynamics on profinite groups. (English) Zbl 07472622
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Summary: A profinite group equipped with an expansive endomorphism is equivalent to a one-sided group shift. We show that these groups have a very restricted structure. More precisely, we show that any such group can be decomposed into a finite sequence of full one-sided group shifts and two finite groups.

MSC:
37B10 Symbolic dynamics
37B05 Dynamical systems involving transformations and group actions with special properties (minimality, distality, proximality, expansivity, etc.)
22C05 Compact groups
20E18 Limits, profinite groups
12H10 Difference algebra

Keywords:
symbolic dynamics; group shift; Markov subgroup; expansive automorphism; expansive dynamical system; Babbitt’s decomposition

Full Text: DOI

References:
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