

Deroin, Bertrand**Locally discrete expanding groups of analytic diffeomorphisms of the circle.** (English)[Zbl 1455.37029](#)

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Summary: We show that a finitely subgroup of $\text{Diff}^\omega(\mathbf{S}^1)$ that is expanding and locally discrete in the analytic category is analytically conjugated to a uniform lattice in $\widetilde{\text{PGL}}_2^k(\mathbf{R})$ acting on the k th covering of $\mathbf{R}P^1$ for a certain integer $k > 0$.

MSC:

- 37C85 Dynamics induced by group actions other than \mathbb{Z} and \mathbb{R} , and \mathbb{C}
- 37E10 Dynamical systems involving maps of the circle
- 20E06 Free products of groups, free products with amalgamation, Higman-Neumann-Neumann extensions, and generalizations
- 37D25 Nonuniformly hyperbolic systems (Lyapunov exponents, Pesin theory, etc.)
- 57S05 Topological properties of groups of homeomorphisms or diffeomorphisms

Keywords:

analytical conjugation; expanding map; map of the circle

Full Text: [DOI](#) [arXiv](#)