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**Azer Akhmedov** and **Michael P Cohen\*** ([michael.cohen@ndsu.edu](mailto:michael.cohen@ndsu.edu)). *Existence and genericity of finite topological generating sets for homeomorphism groups.*

We show that the topological groups  $\text{Diff}_+^1(I)$  and  $\text{Diff}_+^1(\mathbb{S}^1)$  of orientation-preserving  $C^1$ -diffeomorphisms of the interval and the circle, respectively, admit finitely generated dense subgroups. We also investigate the question of genericity (in the sense of Baire category) of such finite topological generating sets in related groups. We show that the generic pair of elements in the homeomorphism group  $\text{Homeo}_+(I)$  generate a dense subgroup of  $\text{Homeo}_+(I)$ . By contrast, if  $M$  is any compact connected manifold with boundary other than the interval, we observe that an open dense set of pairs from the associated boundary-fixing homeomorphism group  $\text{Homeo}(M, \partial M)$  will generate a discrete subgroup. We make similar observations for homeomorphism groups of manifolds without boundary including  $\mathbb{S}^1$ . (Received February 23, 2016)