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Title: Groups of bounded automorphisms of a free group of countably infinite rank

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We consider the subgroup $\mathcal{E}_X < \text{Aut}(F_\infty)$ generated by elementary simultaneous Nielsen automorphisms, introduced by R. COHEN in 1973. The still open Solitars conjecture states that \mathcal{E}_X coincides with the subgroup of bounded automorphisms. We prove that \mathcal{E}_X is generated by involutions, \mathcal{E}_X is perfect, and it has trivial center. We conclude that a subgroup of bounded automorphisms of a relatively free nilpotent group of infinite rank is generated by involutions.

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