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Mladen Bestvina*, Department of Mathematics, University of Utah, 155 S 1400 E, Salt Lake City, UT 84112. *Topology and Geometry of $Out(F_n)$* .

The study of $Out(F_n)$, the group of outer automorphisms of the free group F_n of rank n , began by Nielsen in the 1920's. It reached the modern in the 1980's when Culler and Vogtmann introduced *Outer space*, a contractible space on which $Out(F_n)$ acts properly discontinuously. More recently, metric properties of Outer space have become a focus of study, giving simpler proofs of old results and opening doors to new. The talk will emphasize analogies with mapping class groups and Teichmüller theory. (Received June 5, 2011)