Tree almost automorphism groups

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Abstract: Neretin's group is the group of tree almost automorphisms, i.e. homeomorphisms of the boundary of the tree that are piecewise tree automorphisms. It is a locally compact totally disconnected group. It naturally contains the automorphism group of the tree as well as some Higman-Thompson group. In this talk I will describe some geometric properties of some generalizations of these groups, prove that they are compactly presented and give an upper bound on their Dehn function.

In the introductory part I will talk about trees and their boundaries, automorphisms of trees, the topology on the automorphism group of a tree.