Centralizers in virtually free pro-p groups

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Results in pro-p group theory (Henn) show that the centralizers of finite subgroups play a very important role for its structure. For virtually free pro-p groups (i.e. pro-p groups with an open free pro-p subgroup) the cohomology of the centralizers of finite subgroups controls the cohomology of the group (see work of C.Scheiderer). In this talk we present the idea how to show that G modulo the normal closure of all the centralizers of finite subgroups is free pro-p whenever G is virtually free pro-p. Our proof relies on the Kurosh subgroup theorem for open subgroups of a free product of pro-p groups.

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