

The virtual Haken conjecture

Ian Agol

Univesrity of California, Berkeley

We prove that cubulated hyperbolic groups are virtually special. The proof relies on results of Haglund and Wise which also imply that they are linear groups, and quasi-convex subgroups are separable. A consequence is that closed hyperbolic 3-manifolds have finite-sheeted Haken covers, which resolves the virtual Haken question of Waldhausen and Thurston's virtual fibering question. Part of the result depends on joint work with Groves and Manning and Wise's Malnormal Special Quotient Theorem.