999-57-200 **Emily Hamilton*** (`emh@mathcs.emory.edu`), Department of Mathematics & Computer Science, Emory University, Atlanta, GA 30322. *Subgroup separability of free products with amalgamation of hyperbolic 3-manifold groups.*

Let H be a subgroup of a group G. H is *separable* in G if given any element $g \in G \setminus H$, there is a finite index subgroup $K \subset G$, such that $H \subset K$ but $g \notin K$. A group G is *subgroup separable* if every finitely generated subgroup of G is separable in G. Subgroup separability is a powerful property. It has applications in group theory and geometric topology. In group theory, it is linked to the solution of generalized word problems. In geometric topology, it is the traditional group-theoretic tool used to decide if a given immersion in a manifold M will lift to an embedding in a finite covering of M.

In this talk we examine subgroup separability of free products with amalgamation of two hyperbolic 3-manifold groups. (Received August 23, 2004)

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