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Kathryn Mann* (kpmann@math.berkeley.edu). *Automatic continuity for homeomorphism groups.*

A Polish group G has *automatic continuity* if every group homomorphism from G to a separable topological group is continuous. In the past 10 years, a surprising number of groups have been shown to have this property. In this talk I'll discuss a new result proving automatic continuity for the groups of self-homeomorphisms of topological manifolds. Although some ingredients will be familiar, this case of automatic continuity also uses fundamental results from manifold topology that help us understand the Polish group structure of homeomorphism groups. (Received February 09, 2016)