

## Essential holonomy and the lower central series

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A measure-preserving action of a countable group  $G$  is essentially free if the set of points with non-trivial stabilizer has zero measure. A generalization of this notion for group actions where every point has non-trivial stabilizer is the notion of an action with no essential holonomy, introduced by the speaker in a joint work with Groeger. In this talk, I will consider the connection between the action having no essential holonomy, and the lower central series of the acting group, for group actions on rooted trees. This is joint work with Steve Hurder.

**(joint work with Steve Hurder)**