

Meeting: 999, Nashville, Tennessee, SS 5A, Special Session on Topological Aspects of Group Theory

999-20-172 **Susan Hermiller*** (smh@math.unl.edu), Department of Mathematics, University of Nebraska, Lincoln, NE 68588-0130, **Derek F. Holt** (dfh@maths.warwaick.ac.uk), Mathematics Institute, University of Warwick, CV4 7AL Coventry, England, and **Sarah Rees** (Sarah.Rees@ncl.ac.uk), Department of Mathematics, University of Newcastle, NE1 7RU Newcastle, England. *When are geodesic languages for groups star-free?*

There are many classes of finitely presented groups for which the set of all geodesics is a regular language. In this talk I will discuss geometric and combinatorial properties of finitely presented groups whose set of geodesics satisfy the more restrictive language theoretic property of star-free regularity. (Received August 22, 2004)