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Maranda Franke*, mfranke2@math.unl.edu. *Geodesic Language Complexity and Group Structure*. Preliminary report.

A finitely generated group has solvable word problem if its language of geodesics is computable; the complexity of this language has connections to algebraic and geometric properties of the group. Gilman, Hermiller, Holt and Rees showed that a group is virtually free if and only if there is a finite generating set which produces a locally excluding geodesic language. In my poster presentation, I will discuss existence results that were motivated by the search for a group theoretic characterization of the related language restriction piecewise excluding. (Received August 20, 2016)