1067-20-1127 **Jason Behrstock** (Jason.Behrstock@lehman.cuny.edu) and **Ruth Charney*** (charney@brandeis.edu). *Divergence in right-angled Artin groups.*

The divergence, $div(\alpha, r)$, of a geodesic α measures the length of the shortest path between two points on α that stays outside the ball of radius r about their midpoint. We give a group theoretic criterion for determining when a geodesic in a right-angled Artin group G has super-linear divergence and show that this divergence is at most quadratic. We use this to describe the structure of the asymptotic cone of G and to show that every non-abelian subgroup of G has an infinite dimensional space of quasimorphisms. (Received September 19, 2010)