1067-Z1-2255   **Robin Neumayer***, 1400 Greene St PO Box 83442, Columbia, SC 29225. *Asymptotic Connectivity of Hyperbolic Tilings.* Preliminary report.

Asymptotic connectivity is a measure of overall connectivity of infinite graphs, computed by finding the average connectivity of a ball centered at a basepoint and looking at the behavior of the connectivity in the limit. It is unclear in the general case if asymptotic connectivity is independent of the choice of basepoint. We will study infinite graphs comprising half-planes with d-regular hyperbolic tilings of f-gons for varying f and d. In particular, we will prove that the asymptotic connectivity of a graph G formed by joining arbitrarily many half-planes of regular hyperbolic tilings of varying degrees of varying f-gons is independent of basepoint. (Received September 22, 2010)