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**Nimish A Shah\*** ([shah@math.osu.edu](mailto:shah@math.osu.edu)), The Ohio State University, Dept of Mathematics, 100 Math Tower, 231 W 18th Ave, Columbus, OH 43210-1174, and **Hee Oh**. *Geodesic evolution of certain measures on unit normal bundles of closed totally geodesic submanifolds in geometrically finite hyperbolic spaces.*

On the unit normal bundle of a closed totally geodesic immersions in a geometrically finite hyperbolic space, we describe certain measures associated to the Patterson-Sullivan measures on the boundary. We obtain geometric interpretations of finiteness of these measures. We also description of the limiting distributions of the evolution of these measures under the geodesic flow. The results have applications to orbital counting for actions of geometrically finite hyperbolic groups. (Received February 13, 2011)