

1116-20-2122      **Atish J Mitra\*** ([atish.mitra@gmail.com](mailto:atish.mitra@gmail.com)). *Infinite Groups and Absolute Extensors*.

M. Gromov introduced the concept of asymptotic dimension of a metric space as a large scale analog of classical topological dimension and as a coarse invariant of metric spaces. This and related large scale dimensions turn out to be an important tool in understanding some properties of finitely generated groups viewed as metric spaces.

In this talk we introduce the new concept of large scale absolute extensors of a metric space and study its relations to various aspects of coarse geometry. We characterize this concept in several ways, and relate it with asymptotic dimension of groups. We use this concept to study asymptotic properties of finitely generated groups. (Received September 21, 2015)