

1125-AE-831

**Greg Bell\*** ([gcbell@uncg.edu](mailto:gcbell@uncg.edu)), 144 Petty Building, 317 College Avenue, Greensboro, NC 27412.

*Asymptotic dimension of groups.*

Dimension is a fundamental concept that can be applied in many areas of mathematics. We describe a way to assign dimension to countable groups due to Gromov. This so-called asymptotic dimension is the large-scale equivalent of the topological (covering) dimension and so it has properties that are analogous to the properties of covering dimension. We will survey the basic results before describing some deep consequences and open problems. (Received September 12, 2016)