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**Julie Bergner\*** (jbergner@math.ksu.edu). *Thirteen ways of looking at a topological group.*

Topological groups have long been a useful kind of object in many areas of mathematics. Over the years, there have been many other kinds of objects proven to be equivalent to these spaces with a group structure. Examples of such include loop spaces and group-like  $A_\infty$ -spaces. More recent work has focused on diagrams of spaces, in particular those given by algebraic theories, which give one of the spaces a group structure. The focus of this talk will be other diagrams giving the same information but which are simpler than algebraic theories. (Received September 21, 2006)