Meeting: 1004, Bowling Green, Kentucky, SS 14A, Special Session on Geometric Topology and Group Theory

1004-55-211 Greg Conner* (conner@math.byu.edu), Math Dept., BYU, Provo, UT 84602, and x. Path Spaces and cohomology of the fundamental group.

We will discuss how to construct a space which has some of the the properties of the classical universal covering of a space for spaces which do not admit universal coverings. The classical "path space" one normally describes when constructing such a universal cover can be quite complicated, and may not even be Hausdorff for relatively nice nonsemilocally simplyconnected spaces. We will discuss a simpler notion of the path space and give some applications to calculating the cohomology of complicated spaces. (Received January 24, 2005)