

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

1004-57-167 **Jens Harlander** and **Jacqueline A Jensen*** (jensen@shsu.edu), Box 2206, Department of Mathematics and Statistics, Sam Houston State University, Huntsville, TX 77340. *On the Homotopy Type of CW-Complexes with Aspherical Fundamental Group.* Preliminary report.

This talk is concerned with the homotopy classification of finite CW-complexes. A (G, n) -complex is a finite n -dimensional CW-complex with fundamental-group G and vanishing higher homotopy-groups up to dimension $n - 1$. In case G is finite dimensional there is a unique (up to homotopy) (G, n) -complex on the minimal Euler-characteristic level $\chi_{min}(G, n)$. We show that if the finite dimensional group G contains the trefoil group T as a retract then there is more than one homotopy-type on the level $\chi_{min}(G, n) + 1$. (Received January 24, 2005)