Ying Hu*, Department of Mathematics, Louisiana State University, Baton Rouge, LA 70802.

Left-orderability and cyclic branched covers. Preliminary report.

A group is called left-orderable if one can put a total order < on the set of group elements so that inequalities are preserved by group multiplication on the left. The left-orderability of 3-manifold groups is closely related to the concepts of L-spaces and taut foliations, as conjectured by Boyer-Gordon-Watson. In this talk, we will discuss the left-orderability of fundamental groups of cyclic branched covers of the three sphere. (Received January 16, 2015)