Meeting: 1007, Santa Barbara, California, SS 6A, Special Session on Geometric Methods in Three Dimensions

1007-57-63 Joseph Maher* (maher@its.caltech.edu). Heegaard splittings and virtual fibers.

We show that if a closed hyperbolic 3-manifold has a sequence of finite covers of bounded Heegaard genus, then it is virtually fibered. This generalizes a theorem of Lackenby, removing restrictions needed about the regularity of the covers. In fact, we can replace the assumption that the covers have bounded Heegaard genus with the weaker hypotheses that the Heegaard splittings for the covers have Heegaard gradient zero, and also bounded width, in the sense of Scharlemann-Thompson thin position for Heegaard splittings. (Received January 26, 2005)