Meeting: 1004, Bowling Green, Kentucky, SS 4A, Special Session on Knot Theory and Its Applications

1004-57-117 Colin C. Adams* (cadams@williams.edu), Bronfman Science Center, Williams College, Williamstown, MA 01267. *Quasi-Fuchsian Surfaces in Hyperbolic Knot Complements*. Preliminary report.

An essential surface with boundary properly embedded in a hyperbolic knot exterior can be either a virtual fiber or an accidental surface or a quasi-Fuchsian surface. In the case the surface is quasi-Fuchsian, one can measure how far it is from being totally geodesic using its cusp thickness. We discuss a variety of results about the cusp thickness of such surfaces. (Received January 20, 2005)