1116-57-1831 Christian R Millichap* (cmillich@linfield.edu) and William Worden. Can two hyperbolic 2-bridge link complements be commensurable?

Two manifolds are commensurable if they share a common finite sheeted cover. In this talk, we show that the only commensurable hyperbolic 2-bridge link complements are the figure-eight knot complement and the 6_2^2 link complement. To prove this fact, we first show that any non-arithmetic hyperbolic 2-bridge link complement admits no hidden symmetries. As a corollary, we obtain a characterization of 3-manifolds with non-trivial JSJ-decomposition and rank two fundamental groups. This work requires a careful analysis of the tilings of \mathbb{R}^2 that come from lifting the canonical triangulations of the cusps of hyperbolic 2-bridge link complements. (Received September 21, 2015)