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

1007-57-30   **David Futer*** (`dfuter@math.stanford.edu`), Mathematics Department, Stanford University, Stanford, CA 94305, and **Jessica S Purcell** (`jpurcell@math.utexas.edu`), Mathematics Department, University of Texas at Austin, Austin, TX 78712. *Links with no exceptional surgeries.*

We show that if a knot admits a prime, twist-reduced diagram with at least 4 twist regions and at least 6 crossings per twist region, then every non-trivial Dehn filling of that knot is hyperbolike. A similar statement holds for links. We prove this using two arguments, one geometric and one combinatorial. The combinatorial argument further implies that every link with at least 2 twist regions and at least 6 crossings per twist region is hyperbolic. (Received December 16, 2004)