Meeting: 998, Houston, Texas, SS 7A, Special Session on Low Dimensional Topology

998-57-380 Lorena Armas-Sanabria\* (larmas@math.unam.mx), Instituto de Matematicas, UNAM, Circuito Exterior, Ciudad Universitaria, 04510 Mexico D.F., Mexico. An example of a hyperbolic 3-manifold realizing a bound on Dehn fillings. Preliminary report.

Let M be an irreducible 3-manifold with an incompressible torus boundary T and  $\gamma$  a longitudinal slope on T, which bounds an incompressible surface with genus 2. Suppose there exists a slope r that produces an essential 2-sphere by Dehn filling. Let q be the minimal geometric intersection number between the essential 2-sphere and the core of the Dehn filling. Matignon-Sayari proved that q = 2 or the minimal geometric intersection number between  $\gamma$  and r is bounded by 3. In this talk we show an example that realizes that bound. (Received March 02, 2004)