

**Department of Mathematical Sciences
Colloquium**

Cesar Garza

Department of Mathematical Sciences, UTEP

**SOME EXAMPLES OF DISTANCE 3 TOROIDAL SURGERIES
ON HYPERBOLIC KNOTS**

By the work of Thurston, any surgery on a hyperbolic knot in the 3-sphere produces a hyperbolic 3-manifold except in at most finitely many cases. So far, the figure 8-knot seems to be the best candidate for a hyperbolic knot with the most (8) non-trivial exceptional surgeries. In recent years, much progress has been made in the classification of hyperbolic knots admitting more than one exceptional *toroidal* surgery. In fact, such classification is known for toroidal surgeries with distance at least 4. In this talk we will introduce some of the basic notions and results in this area of research, and discuss some new examples of toroidal surgeries at distance 3.

**Friday, March 6, 2009 at 3 pm in Bell Hall 143
The University of Texas at El Paso**

Refreshments will be served in front of the colloquium room,
15 minutes before the start of the colloquium.

For further information, please contact Dr. Andrzej Pownuk, Bell Hall 201.
Phone: (915) 747-6759, e-mail: ampownuk@utep.edu.

