

Department of Mathematics  
University of Oklahoma

**Karcher Colloquium**  
**Thursday, March 27, 2008**  
**4:00 PM in PHSC 1105**  
Tea at 3:30 PM in PHSC 424

**Title:** *Hyperbolic manifolds that are codimension-2-link complements in the  $n$ -sphere ( $n = 3, 4$ ) and how to recognize them*

**Speaker:** *Dubravko Ivansic, Murray State University*

**Abstract:**

Many hyperbolic  $n$ -manifolds ( $n = 3, 4$ ) are known to be codimension-2-link complements in the  $n$ -sphere. We discuss this phenomenon and show how examples are proven to be link complements in the sphere. If  $n = 3$  and the manifold is given by side-pairings of a polyhedron, we give a straightforward method based on handle decomposition that produces the link diagram.