

1083-57-201

Meredith Casey* (mcasey@gatech.edu), 251 10th St NW D305, Atlanta, GA 30318. *Branched Coverings of Contact Manifolds.*

Branched coverings are often used in low-dimensional topology to study contact manifolds. In this talk we will first discuss what is known about the construction of contact manifolds via branched covers, particularly the construction of covers branching over a knot in (S^3, ξ_{std}) . We will then present methods for constructing contact manifolds using branched covers and open book decompositions. Using this construction, and given only the braid word of the branch locus and the covering map, what all can be determined about the covering contact manifold? The remainder of the talk will discuss answers to this question, with particular emphasis on determining if the covering contact structure is tight or overtwisted. (Received August 28, 2012)