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

1007-57-100 **Jennifer C Schultens***, Department of Mathematics, UCD, 1 Shields Ave, Davis, CA 95616, and **Hugh Howards**, Department of Mathematics, Wake Forest University, Winston-Salem, NC 27109. *Thin position of knots and 3-manifolds.* Preliminary report.

The 2-fold branched cover of the 3-sphere with respect to a knot yields a 3-manifold. This construction provides a means of lifting a height function on the 3-sphere to a Morse function on the 3-manifold. We discuss the question as to whether thin position of the knot implies thin position of the resulting 3-manifold. (Received February 09, 2005)