

1037-57-321 **Keiko Kawamuro*** (kk6@rice.edu), 6100 S Main Street MS-136, Houston, TX 77005. *On transverse knots and branched covers.*

We study contact manifolds that arise as cyclic branched covers of transverse knots in the standard contact 3-sphere. We discuss properties of these contact manifolds and describe them in terms of open books and contact surgeries. In many cases we show that such branched covers are contactomorphic for smoothly isotopic transverse knots with the same self-linking number. These pairs of knots include most of the non-transversely simple knots of Birman–Menasco and Ng–Ozsvath–Thurston. (This is a joint work with Shelly Harvey and Olga Plamenevskaya.) (Received February 05, 2008)