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**Robert J. MacG. Dawson\*** (rjmdawson@gmail.com), Saint Mary's University, 933 Robie St, Halifax, NS B3H 3C3, Canada. *Some results on intangent spreads of convex bodies*. Preliminary report.

By a spread of bodies we will understand a real  $n$ -manifold embedded in a (here metric) hyperspace - that is, an  $n$ -parameter family of bodies. Monotone spreads (those for which every two bodies are joined by a monotone arc) have been considered elsewhere (by the speaker) in the context of the Chebyshev nearest neighbor property. Here we consider a weaker property, that of *intangency*: a spread of bodies is intangent if no two elements have a common boundary point at which they share a supporting hyperplane (in the same sense). All monotone spreads have this property, as do many others.

We will examine some implications of this property, which is sufficient to explain several observations about monotone spreads. We will see surprising (though elementary) connections to algebraic topology. (Received January 19, 2015)