1158-57-72 **Jose Roman Aranda Cuevas*** (romanaranda123@gmail.com), 751 W Benton St Apt 27, Iowa City, IA 52246. *Thin position through trisections of 4-manifolds.*

In 1994, M. Scharlemann and A. Thompson introduced a complexity for handle decompositions of 3-manifolds called the width. In the last decade, taking a minimal width decomposition of a 3-manifold has been a useful technique. As an example, M. Scharlemann and J. Schultens used this to show that the connected sum of $n$ knots in $S^3$ has tunnel number at least $n$. In this talk, we use ideas from the theory of trisections of 4-manifolds to define the width of a 4-dimensional handle decomposition and introduce the thin position of a compact smooth 4-manifold. (Received February 20, 2020)