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Ryan C Blair* (ryblair@math.upenn.edu) and Maggy Tomova. Width is Not Additive.
We examine the behavior of Gabai's notion of width of a knot under the operation of connected sum. We develop the construction suggested by Scharlemann and Thompson to obtain an infinite family of pairs of knots $K_{1}$ and $K_{2}$ so that $w\left(K_{1} \sharp K_{2}\right)=\max \left\{w\left(K_{1}\right), w\left(K_{2}\right)\right\}$. This is the first known example of a pair of knots such that $w\left(K_{1} \sharp K_{2}\right)<$ $w\left(K_{1}\right)+w\left(K_{2}\right)$. (Received February 15, 2011)

