Daniel S Silver and Susan G Williams* (swilliam@southalabama.edu). *Tangles and links: a view with trees.

In 1999, D. Krebes used the Kauffman bracket and skein theory to show that if a tangle $T$ embeds in a link $\ell$, then the determinant of $\ell$ is divisible by the gcd of the determinants of the numerator and denominator closures of $T$. D. Ruberman later gave a proof using homology of branched cyclic covers. We give a short proof using an elementary result about spanning forests for graphs. We also recover an analogous result about 6-tangles that first appeared in the authors’ 2005 paper with J. Przytycki. (Received February 05, 2018)