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*Right-angled volume of alternating links.* Preliminary report.

For any prime alternating link  $K$ , Menasco and Thistlethwaite described a decomposition along invariant Conway spheres into alternating tangles. We extract from their decomposition a new geometric link invariant, the "right-angled volume" of  $K$ , which is the sum of volumes of right-angled checkerboard polyhedra associated to the alternating tangles that constitute  $K$ . We describe a method to compute it from a link diagram and discuss some applications. (Received July 18, 2017)