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Hyperbolic alternating virtual link groups. (English) Zbl 1244.57008
Groups Geom. Dyn. 6, No. 1, 83-96 (2012).

The article under review studies the geometry of certain link complements. The author identifies two types of forbidden tangles and proves that if a prime, alternating link projection does not contain either of those two tangles then the fundamental group G of the complement is the fundamental group of a finite, piecewise Euclidean 2-complex of nonpositive curvature. If one assumes that the link projection is dense, then G is shown to be hyperbolic.

Reviewer: [Thomas Koberda \(Cambridge\)](#)

MSC:

[57M05](#) Fundamental group, presentations, free differential calculus
[57M50](#) General geometric structures on low-dimensional manifolds
[20F65](#) Geometric group theory
[20F67](#) Hyperbolic groups and nonpositively curved groups

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Keywords:

alternating virtual knot; hyperbolic group; Wirtinger complex; non-positively curved square complex

Full Text: [DOI](#)

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