

**Harlander, Jens**

**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

Cited in 1 Document

**Keywords:**

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

**Full Text:** [DOI](#)

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