

### **Graph embedding with no vertex accumulation points**

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#### **ABSTRACT**

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We show a relationship between infinite graphs with a planar embedding with no vertex accumulation point, characterized by Halin, and finite graphs with a planar embedding such that the vertices of a subset of their vertices are in the same face, characterized by Oubiña and Zucchello. We generalize this relationship to finite genus tubular surfaces.

In addition we prove that set of forbidden minors for such embeddings is finite. We show, in detail, forbidden minors in the case of a cylinder, thus solving the problem proposed by Thomassen in 1994.

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**Keywords:** *Graph Theory*

**Mathematics Subject Classification:** *05-XX*

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