

Counting $K_{1,t}$ and $K_{2,t}$ in higher connected triangulations

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In 1984, Alon and Caro determined the maximum numbers of copies of $K_{1,t}$ and $K_{2,t}$ in an n -vertex planar triangulation. We extend these results to triangulations with higher connectivity. Specifically, we determine the exact maximum number of copies of $K_{1,t}$ and $K_{2,t}$ in a 4-connected planar triangulations, and that of $K_{1,t}$ in a 5-connected planar triangulations. We also characterize all extremal graphs that attain these bounds.

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