Construction of 4-connected triangulations on the projective plane

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In 1968, Kotzig [2] proved a generating theorem of 4-connected triangulations on the plane. Recently, Brinkmann, Larson, Souffriau and Van Cleemput [1] proved a new generating theorem of the same class. In this talk, we show that a generating theorem of a 4-connected triangulations on the projective plane similar to the theorem by Brinkmann, Larson, Souffriau and Van Cleemput. That is, we describe a recursive structure for the class of 4-connected triangulations on the projective plane.

References

[1] G. Brinkmann, C. Larson, J. Souffriau and N. Van Cleemput, Construction of planar 4-connected triangulations, Ars Mathematica Contemporanea **9**(2015), 145–149.

[2] A. Kotzig, Regularly connected trivalent graphs without non-trivial cuts of cardinality 3, Acta Fac. Rerum Natur. Univ. Comenian. Math. **21**(1968), 1–14.