

## **A combinatorial description of the totally nonnegative Grassmannian**

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The totally nonnegative Grassmannian is the subset of the Grassmannian in which all Plücker coordinates have the same sign. As with totally positive matrices, it is possible to provide a parametrization using certain weighted planar graphs, and the weights can be written as Laurent monomials in the variables of a particularly nice cluster. We will give combinatorial formulas (in both directions) for a bijection between points in the TNN Grassmannian and these special graphs.