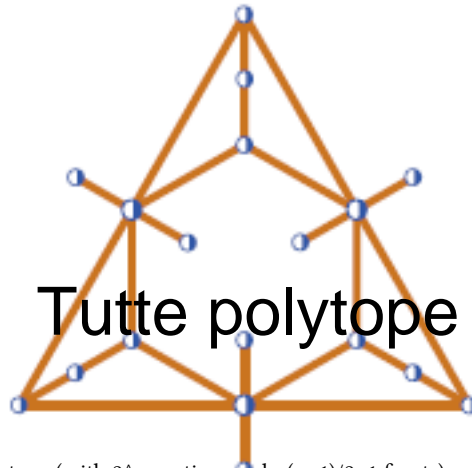


# Bled'11 - 7th Slovenian International Conference on Graph Theory

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## Content :

We construct an  $n$ -dimensional polytope (with  $2^n$  vertices and  $n(n+1)/2+1$  facets) whose volume is equal to the Tutte polynomial of the complete graph, divided by  $n!$ . The proof is bijective and consists of a triangulation of the polytope into simplices naturally corresponding to labelled forests. We present several applications, among them an improved bound for the number of labelled connected graphs and new recursive formulas for the generating function of labelled connected graphs by the number of edges.

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