

DIFFERENT REALIZATIONS OF THE STASHEFF POLYTOPE

SHATHA ASSAAD SALMAN, ANWAR KHALEEL FARAJ & ALAA SBEEH DAWOOD

Department of Applied Science, Applied Mathematics, University of Technology, Baghdad, Iraq

ABSTRACT

For the importance of the Stasheff polytope in different area of mathematics and the relationship between them we studied the Stasheff polytope and the permutohedron in view of combinatorial and algebra using the method that computer the coordinate of their vertices. The relationship between the associahedron and the permutohedron are also explained with the aid of graph theory.

KEYWORDS: Stasheff Polytope, Permutohedron