

1018-05-198

Christophe Hohlweg and **Carsten E. M. C. Lange*** (lange@math.tu-berlin.de), University of Washington, Department of Mathematics, Seattle, WA 98195-4350. *Realizations of the associahedron and cyclohedron.*

We describe many different realizations with integer coordinates for the associahedron (i.e. the Stasheff polytope) and for the cyclohedron (i.e. the Bott-Taubes polytope) and compare them to the permutahedron of type A and B respectively.

The coordinates are obtained by an algorithm which uses an oriented Coxeter graph of type A or B respectively as only input and which specialises to a procedure presented by J.-L. Loday for a certain orientation of A. (Received March 06, 2006)