

Coxeter combinatorics on affine root systems

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Motivated by their study of cluster algebras Fomin and Zelevinsky introduced, for any finite root system, the set of its almost-positive roots and a compatibility relation on it. The resulting combinatorial structure, known as the generalized associahedron, encodes many of the properties of the associated finite-type cluster algebras with a bipartite initial seed.

In this talk, after briefly reviewing some of the finite-type results, we explain how to extend them to the acyclic affine case.

This is joint work with Nathan Reading.

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