

Queen's Algebraic Geometry — Seminar —

RIGHT-ANGLED ARTIN GROUPS AND MONOMIAL IDEALS

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Abstract

A combinatorial construction originating in work of Davis and Januszkiewicz gives a variety of interesting topological spaces: these include classifying spaces for certain Coxeter and Artin groups, as well as the moment-angle complexes of Buchstaber and Panov.

The algebraic topology of such spaces tends to be governed by combinatorial commutative algebra. I will give some examples. In particular, resolutions of monomial ideals over the exterior algebra describe the homology of certain subgroups of right-angled Artin groups.

Monday, February 12, 2007
4:30pm – 5:30pm
115 Jeffery Hall