



Department of Mathematics and Statistics

Colloquium

Tuesday October 17

AMB 164 4:00 - 5:00 pm

Weak orders - left and right - and configuration spaces

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Abstract

We will define the nerve (*a.k.a.* order complex) of a partially-ordered set and give some examples, and then define nerve in the more general setting of categories. Given a finite Coxeter group W , we will recall the left and right weak orders on W and assemble them into a category whose nerve has the homotopy type of the complement of the discriminant associated with W . The construction is based on a model of the circle action on complexified arrangement complements developed in joint work with Emanuele Delucchi. The current project is joint work in progress with Dana Ernst and Sonja Riedel.

Refreshments at 3:45