

1139-05-605

**Caroline Klivans\*** (klivans@brown.edu). *Simplicial resolutions and no  $k$ -equal spaces.*

In this talk I will consider the topology of real no  $k$ -equal spaces via combinatorial simplicial resolutions. Using this method, we are able to equate the Betti number of the real no  $k$ -equal space with the size of a cellular spanning tree of the hypercube. The result demonstrates a new approach to determining the topology of complements of arrangements using combinatorial considerations but with no need of poset analysis.

Joint work with Yuliy Baryshnikov and Nicholas Kosar. (Received February 20, 2018)