

1136-13-185

Sara Faridi* (faridi@mathstat.dal.ca) and **Mina Bigdeli**. *Chordality and ideals with linear resolution*. Preliminary report.

This talk will be about various concepts of chordality that have been developed to produce monomial ideals with linear free resolution. In 1990 Froberg completely characterized ideals generated by degree 2 monomials having linear resolution in terms of graphs. For monomial ideals generated in any degree this task is not as easy since the free resolution depends on the characteristic of the base field.

In this talk we will review higher dimensional versions of chordality that have been developed for hypergraphs and simplicial complexes. and the combinatorial and algebraic properties that result from them.

The main part of the talk is based on joint work with Mina Bigdeli. (Received January 14, 2018)