

1106-05-855

Nursel Erey*, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS B3H 4R2, Canada, and **Sara Faridi**. *Betti Numbers of Simplicial Forests*. Preliminary report.

Given a simplicial complex one can associate the facet ideal which is generated by the monomials corresponding to the facets of the simplicial complex. The relation between the algebraic invariants of the facet ideal and the combinatorial properties of the corresponding simplicial complex has received considerable amount of interest. In this talk, we will focus on a class of simplicial complexes, namely simplicial forests. We will combinatorially characterize the Betti number for the facet ideal of a simplicial forest. This generalizes the previously known characterization of the Betti number for the edge ideal of a graph forest. (Received September 08, 2014)