

MATEMATISKA INSTITUTIONEN
STOCKHOLMS UNIVERSITET
Avd. Matematik

SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Måndagen den 4 juni kl. 14.15–15.15 presenterar Afshin Goodarzi sitt arbete “Combinatorial aspects of monomial ideals” (30 högskolepoäng, avancerad nivå).

Handledare: Ralf Fröberg

Plats: Sal 21, hus 5, Kräftriket

Abstract:

To every squarefree monomial ideal one can associate a hypergraph. In this dissertation we will study some algebraic properties of monomial ideals via the combinatorial properties of associated hypergraphs. In the first part of this thesis, we show that the Hilbert series of a monomial ideal can be obtained from the so called edge induced polynomial of the associated hypergraph. In the second part we focus on quadratic case and we provide explicit formulas for some graded Betti numbers of these ideals in terms of combinatorial data of associated hypergraph.

Alla intresserade är välkomna!