

MATEMATISKA INSTITUTIONEN
STOCKHOLMS UNIVERSITET
Avd. Matematik

SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Onsdagen den 24 september kl. 11.00 - 12.00 presenterar Michela Di Marca sitt arbete "Properties of the associated graded ring of a commutative ring" (30 högskolepoäng, avancerad nivå).

Handledare: Christian Gottlieb

Plats: Sal 306, hus 6, Kräftriket

Sammanfattning: The associated graded ring is the algebraic object associated to the tangent cone of a variety. In this thesis we will try to understand its structure and properties by the study of primary decompositions, superficial elements and reductions, Hilbert function and multiplicities. We will then apply these concepts to semigroup rings and we will find some conditions for these rings in order to have Cohen-Macaulay associated graded ring. Furthermore, we will investigate the shape of regular sequences for the associated graded ring in a more general setting.

Alla intresserade är välkomna!