

MATEMATISKA INSTITUTIONEN  
STOCKHOLMS UNIVERSITET  
Avd. Matematik

## SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Tisdagen den 29 april kl. 10.00–11.00 presenterar Lisa Nicklasson sitt arbete “Geometric constructions and solutions of cubic equations” (30 högskolepoäng, avancerad nivå).

Handledare: Christian Gottlieb

Plats: Sal 37, hus 5, Kräftriket

**Sammanfattning:** It is well known that, using ruler and compass, the angle can not be trisected in general, and the regular  $p$ -gon, where  $p$  is an odd prime, can be constructed if and only if  $p$  is a Fermat prime. Also, cubic equations can generally not be solved. But what happens if we allow angle trisection? Which  $p$ -gons can be constructed, and what cubic equations can be solved? These questions shall be answered, and we shall also see what can be constructed with a marked ruler, and what cubic equations can be solved using a parabola in addition to the classical tools.

Alla intresserade är välkomna!