

MATEMATISKA INSTITUTIONEN
STOCKHOLMS UNIVERSITET
Avd. Matematik

SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Måndagen den 16 juni kl. 11.00–12.00 presenterar Assar Andersson sitt arbete “Solving polynomial equations over $\mathbb{Z}_2$ using DPLL methods” (15 högskolepoäng, grundnivå).

Handledare: Samuel Lundqvist

Plats: Sal 32, hus 5, Kräftriket

Sammanfattning: We start by proving some general properties of polynomials over $\mathbb{Z}_2$, and their connection to the boolean formulas. Next, we present computer representations, and algorithms to compute addition and multiplication, of polynomials over $\mathbb{Z}_2$. Finally, we implement and test some variations of the DPLL procedure to solve certain polynomial equations over $\mathbb{Z}_2$. We also say something about why certain DPLL variations performs better than others.

Alla intresserade är välkomna!