

MATEMATISKA INSTITUTIONEN
STOCKHOLMS UNIVERSITET
Avd. Matematik

SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Tisdagen den 20 november kl. 09.00–10.00 presenterar Isak Trygg Kupersmidt sitt arbete “Topics from discrete geometry and their continuous analogues” (15 högskolepoäng, grundnivå).

Handledare: Paul Vaderlind

Plats: Sal 21, hus 5, Kräftriket

Abstract: This bachelor thesis investigates the interesting relation between theorems from algebraic topology and discrete geometry. The theorems that are covered are some versions of the Borsuk-Ulam theorem, Tucker’s lemma, Sperner’s lemma, Brouwer’s fixed point theorem, as well as the discrete and continuous Ham Sandwich theorem together with some interesting extensions and the polynomial Ham Sandwich theorem. Emphasis is put on easy and intuitive proofs using discrete geometry and algebra. The thesis also contain a brief introduction to some basic concepts from discrete geometry.

Alla intresserade är välkomna!