

MATEMATISKA INSTITUTIONEN
STOCKHOLMS UNIVERSITET
Avd. Matematik

SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Onsdagen den 20 juni kl. 11.00–12.00 presenterar Isabelle Shankar sitt arbete “Fenchel Lagrange Duality with DC Programming” (30 högskolepoäng, avancerad nivå).

Handledare: Yishao Zhou

Plats: Sal 21, hus 5, Kräftriket

Abstract:

In this paper, we present the theory for Fenchel-Lagrange duality and then use this to look at some nonconvex optimization problems. Specifically, we consider an optimization problem with DC objective functions and DC inequality constraints, a few fractional programming problems and a DC programming problem containing a composition with a linear continuous operator. The various primal problems considered are convexified and given Fenchel-Lagrange type dual problems as well as constraint qualifications for strong duality. Later, these results are reformulated into Farkas-type theorems to give a concise presentation of the relationship of each primal problem to its dual problem. Alla intresserade är välkomna!