Universidade de Brasília

Departamento de Estatística



O Programa de Pós-Graduação em Estatística convida para:

SEMINÁRIO

An introduction to conic linear programming and recent research topics

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Sala Multiuso, Prédio CIC/EST

Resumo

Conic linear programs (CLPs) are far-reaching generalizations of linear programs (LPs) and have found applications in many fields. In this talk, we will present an elementary overview of some of the basic classes of CLPs such as semidefinite programs (SDPs), second-order cone programs (SOCPs) and their applications in statistical and computer science problems. We will also discuss some of the newer classes of CLPs such as exponential cone programs (ECPs), which have applications in logistic regression, entropy maximization and many other statistical tasks. In the final part of the talk, we will briefly go over some research trends in conic optimization such as preprocessing techniques, error bounds and some recent results on the convergence rate of certain algorithms.