数学与系统科学研究院

计算数学所学术报告

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报告题目：

An Efficient Semismooth Newton's Method for Support Vector Machine

邀请人： 刘亚锋 副研究员

报告时间： 2019 年 7 月 10 日（周三）下午 **16:00-17:00**

报告地点： 科技综合楼三层 **311** 报告厅

Abstract：

SVM is an important and fundamental technique in machine learning. In this talk, we apply a semismooth Newton method to solve two typical SVM models: the L2-loss SVC model and the ϵ-L2-loss SVR model. A common belief on the semismooth Newton method is its fast convergence rate as well as high computational complexity. Our contribution is that by exploring the sparse structure of the models, we significantly reduce the computational complexity, meanwhile keeping the quadratic convergence rate. Extensive numerical experiments demonstrate the outstanding performance of the method.

欢迎大家参加！