

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Lizhi Liao**

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报告题目:

**Interior Point Neurodynamic
Approach for Convex Quadratic
Programming**

邀请人: 戴彧虹 研究员

报告时间: **2014 年 11 月 25 日 (周二)**

下午 15:30-16:30

报告地点: **数学院南楼二层 210**

会议室

Abstract:

In this talk, the general framework of the interior point neurodynamic approach for optimization will be introduced. Based on this framework, some interior point neurodynamic models for convex quadratic programming will be presented. A key component in every neurodynamic model is an ordinary differential equation (ODE) whose solution trajectory forms a continuous path from an initial point to an equilibrium point which normally represents an optimal solution for the underlying optimization problem. For each our interior point model, theoretical analysis including the limiting behaviors on the continuous trajectory resulting from an ODE will be addressed. Some solution schemes for these ODE systems along with some preliminary numerical results will be presented to illustrate the attractiveness of our interior point neurodynamic models.

欢迎大家参加!