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:

Accelerated Linearized Bregman Method

邀请人： 优化与应用研究中心

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上午 11：00-12：00

报告地点： 科技综合楼三层 311

计算数学所报告厅

<u>Abstract</u>：

We propose and analyze an accelerated linearized Bregman (ALB) method for solving the basis pursuit and related sparse optimization problems. This accelerated algorithm is based on the fact that the linearized Bregman (LB) algorithm is equivalent to a gradient descent method applied to a certain dual formulation. We show that the LB method requires O(1/eps) iterations to obtain an eps-optimal solution and the ALB algorithm reduces this iteration complexity to O(1/sqrt(eps)) while requiring almost the same computational effort on each iteration. Numerical results on compressed sensing and matrix completion problems are presented that demonstrate that the ALB method can be significantly faster than the LB method.

欢迎大家参加！