



数系
求真
勤笃
求天
地

中国科学院数学与系统科学研究院

Academy of Mathematics and Systems Science

Chinese Academy of Sciences

[首页](#) [单位概况](#) [组织机构](#) [研究队伍](#) [科研成果](#) [教育培养](#) [党群文化](#) [人与事](#) [期刊学会](#) [图书馆](#) [信息公开](#)

现在位置: [首页](#) > [学术报告](#)

Academy of Mathematics and Systems Science, CAS Colloquia & Seminars

Speaker: 邹家辉, 首都经济贸易大学

Inviter:

Title: A method to deal with generalized linear regressions in big data

Language: Chinese

Time & Venue:

2022.12.07 19:00-20:00 腾讯会议: 96248182651

Abstract:

This paper proposes a method to accelerate calculation for generalized linear models in big data. We separate the covariates of full model into several groups to build candidate models. In the process of solving each candidate model, we estimate parameters independently via optimal subsampling method. The parameters estimated are combined, by special weights from optimal model averaging, to be the approximate parameter estimation for full model. An algorithm to realize this procedure are designed following parallel calculating technology. As theoretical support, we derive the forms of optimal subsampling probabilities during candidate models estimating, asymptotic distribution of the difference between parameter estimates from candidate models with subsamples and that with full sample size, and asymptotic optimality for the parameter estimates combination. Finally, several numerical experiments and empirical results are shown to illustrate the performance in precision and speed.

[【打印本页】](#) [【关闭本页】](#)

[电子政务平台](#) | [科技网邮箱](#) | [ARP系统](#) | [会议服务平台](#) | [联系我们](#) | [友情链接](#)



中国科学院
CHINESE ACADEMY OF SCIENCES

版权所有 © 中国科学院数学与系统科学研究院 备案号: 京ICP备05002806-1号 京公网安备110402500020号
电话: 86-10-82541777 传真: 86-10-82541972 Email: contact@amss.ac.cn
地址: 北京市海淀区中关村东路55号 邮政编码: 100190

