# 数学与系统科学研究院 计算数学所网络学术报告

报告人: 韩德仁 教授

(北京航空航天大学)

## 报告题目:

The developments of proximal point algorithms

邀请人: 刘歆 研究员

报告时间: 2021年12月4日(周六)

上午 9:10-10:10

报告工具: 腾讯会议(ID: 937 9096 9283)

#### **Abstract:**

The problem of finding a zero point of a maximal monotone operator plays a central role in modeling many application problems arising from various fields, and the proximal point algorithm (PPA) is among the fundamental algorithms for solving the zero-finding problem. PPA not only provides a very general framework of analyzing convergence and rate of convergence of many algorithms, but also can be very efficient in solving some structured problems. In this talk, we give a review on the developments of PPA and its variants, including the recent results with linear proximal term, with the nonlinear proximal term, as well as the inexact forms with various approximate criteria.

### 报告人简介:

韩德仁,教授,博士生导师,现任北京航空航天大学数学科学学院院长、教育部数学类专业教指委秘书长。2002 年获南京大学计算数学博士学位。从事大规模优化问题、变分不等式问题的数值方法的研究工作,发表多篇学术论文。获中国运筹学会青年运筹学奖,江苏省科技进步二等奖等奖项;主持国家自然科学基金杰出青年基金等多项项目。担任中国运筹学会常务理事、江苏省运筹学会理事长;《数值计算与计算机应用》、《Journal of the Operations Research Society of China》、《Journal of Global Optimization》编委。

# 欢迎大家参加!