# 应用数学讲座

#### Научный Семинар по Прикладной Математике

### **Research Seminar on Applied Mathematics**

## 应用数学报告(13)

报告人 / Докладчик / Speaker: 陈德汗: 华中师范大学讲师

题目 / Hазвание / Title:

Regularization and convergence for ill-posed backward evolution equations in Banach spaces

时间 / Время / Time: 21 Jan. 2021, 10:00-12:00 am

地点 / Mecтo / Venue: 腾讯会议 Tencent online meeting

ID: 707 955 486 Password: 7777

#### 摘要 / Аннотация / Abstract:

This talk is concerned with a mathematical study of ill-posed backward evolution equations associated with densely defined linear differential operators in Banach spaces. A general approach is presented to investigate the convergence and stability of a class of regularized solutions for ill-posed backward evolution equations associated with sectorial or half-strip operators. Generalized concepts of qualification pairs and index functions are introduced to characterize the explicit convergence rates of the concerned regularized solutions. Applications of our results to general backward evolution equations are also investigated.