



深圳北理莫斯科大学

УНИВЕРСИТЕТ МГУ-ППИ В ШЭНЬЧЖЭНЕ
SHENZHEN MSU-BIT UNIVERSITY

应用数学讲座

Научный Семинар по Прикладной Математике

Research Seminar on Applied Mathematics

应用数学报告 (12)

报告人 / Докладчик / Speaker:

Guozhi Dong: Humboldt-Universität zu Berlin, Germany

题目 / Название / Title:

Learning-informed differential equation models in optimal control and inverse problems

时间 / Время / Time: 5 Jan. 2021, 15:00-17:00

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

ID: 424 308 085

Password: 7777

摘要 / Аннотация / Abstract:

In this talk, we present some recent study on learning-informed differential equations which serve as constraints in optimization problems. This is relevant when some physics-based constraints, simulated by (system of) differential equations, are not known or only partial known, but can be accessed through data. We will report some approximation properties and error analysis to such a general optimization framework and then illustrate in detail through some examples from optimal control of elliptical PDEs and inverse problems.