

第四届北京大学计算与应用数学拔尖博士生研讨会
暨第七届北京计算数学研究生论坛

2021 年 9 月 10 — 12 日

北京大学

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会议日程

9 月 10 日 (1114 室) 主持人: 梁逸舟, 罗月		
时间	报告人	报告题目
8:50 — 9:00	指导老师	开幕式
9:00 — 9:30	张子筠	Low-rank matrix manifold: Geometry and optimization
9:30 — 10:00	杨明瀚	Second-Order Methods for Deep Learning Problems
10:00 — 10:20	茶歇	
10:20 — 10:50	柳何园	Risk Bounds and Calibration for a Smart Predict-then-Optimize Method
10:50 — 11:20	肖传福	A General Quantum Simulator Based On the Subspace-CP Format
11:20 — 14:00	午餐、自由讨论	
14:00 — 14:30	梁冬冬	FEM Approximation for Parabolic Optimal Control Problems with Pointwise Observations
14:30 — 15:00	高广维	Auxiliary Space Preconditioners for C^0 Finite Element Approximation of Hamilton–Jacobi–Bellman Equations with Cordes Coefficients
15:00 — 15:30	江润	Finite Element Method for a Nonlinear PML Helmholtz Equation with Large Wave Number
15:30 — 15:50	茶歇	
15:50 — 16:20	肖文强	非线性光子晶体能带结构计算的有限元方法研究
16:20 — 16:50	袁茂琴	An Energy Stable Finite Element Scheme for the Three-component Cahn-Hilliard-type Model for Macromolecular Microsphere Composite Hydrogels

9 月 11 日 (1114 室) 主持人: 梁逸舟, 武夷山		
時間	報告人	報告題目
9:00 — 9:30	謝琦	Machine learning force field from Gaussian process regression for active learning, and its applications in material simulations
9:30 — 10:00	李少晗	Robust Multi-object Matching via Iterative Reweighting of the Graph Connection Laplacian
10:00 — 10:20	茶歇	
10:20 — 10:50	金鵬飛	NPTC-net: Narrow-Band Parallel Transport Convolutional Neural Networks on Point Clouds
10:50 — 11:20	陳嘉杰	Some recent progress on singularity formation in incompressible fluids and related models
11:20 — 14:00	午餐、自由討論	
14:00 — 14:30	雷諾	二维四邊形網格上的高阶保正守恒 WENO 重映方法
14:30 — 15:00	楊亦晨	An Approximate Analytical Solution to Knudsen Layers
15:00 — 15:30	范川	Positivity-preserving High Order Finite Volume Hybrid Hermite WENO Schemes for Compressible Navier-Stokes Equations
15:30 — 15:50	茶歇	
15:50 — 16:20	董曉宇	Alternating descent method for gauge cooling of complex Langevin
16:20 — 16:50	李定維	Generative learning from the perspective of gradient flow

9 月 12 日 (1114 室) 主持人: 罗月, 武夷山		
时间	报告人	报告题目
9:00 — 9:30	王昊宇	基于冻结高斯波束法的地震反演成像问题的收敛性分析
9:30 — 10:00	俞炳	Computing Solution Landscape of Nonlinear Space-fractional Problems via Fast Approximation Algorithm
10:00 — 10:20	休息	
10:20 — 10:50	张晓江	A Spatial-Temporal asymptotic preserving scheme for radiation magnetohydrodynamics in the equilibrium and non-equilibrium diffusion limit
10:50 — 11:20	赵钰	A Unified Structure Preserving Scheme for a Multi-species Model with a Gradient Flow Structure and Nonlocal Interactions via Singular Kernels