



Workshop on Data Science and Scientific Computing

29-30 December 2023

Hong Kong Baptist University



DEPARTMENT OF
MATHEMATICS
數學系

Workshop Programme

Date & Time:

- 29 / 12 / 2023 (Friday) 9:00 am – 5:20 pm
- 30 / 12 / 2023 (Saturday) 9:00 am – 12:15 pm

Venue:

AAB 506,
Academic and Administrative Building,
Baptist University Road Campus,
Hong Kong Baptist University, Kowloon Tong, Hong Kong.

<i>29 December 2023</i>		
09:00-09:05	Opening Remark	
09:05-10:20	Session Chair: Michael Ng	
09:05-9:30	Zhigang Jia Jiangsu Normal University	Low-Rank Approximation of Color Image: New Models and Fast Algorithms
09:30-09:55	Yanmei Chen Guangdong Polytechnic Normal University	Artificial Intelligence Driven Digital Whole Slide Image for Intelligent Recognition of Different Development Stages of Tongue Tumor via a New Deep Learning Framework
09:55-10:20	Taixiang Jiang Southwestern University of Finance and Economics	Multi-Dimensional Image Recovery with Plug-and-Play Priors and Tensor Low-Rankness
10:20-10:40	Coffee Break	
10:40-11:55	Session Chair: Xuelel Lin	
10:40-11:05	Huibin Chang Tianjin Normal University	Nonconvex Weighted Variational Metal Artifacts Removal via Convergent Primal-dual Algorithms

11:05-11:30	Tingting Wu Nanjing University of Posts and Telecommunications	Image Recovery Under Non- Gaussian Noise
11:30-11:55	Qiyu Jin Inner Mongolia University	Several Model-Driven Image Restoration Algorithms
11:55-14:30	Lunch	
14:30-15:45	Session Chair: Yuguang Yan	
14:30-14:55	Chuan Chen Sun Yat-Sen University	Enhancing Trustworthy Federated Learning through the VeryFL Open-Source Experimental Platform
14:55-15:20	Zixuan Qin Tianjin University	Uncertainty Based Federated Learning
15:20-15:45	Libin Zheng Hunan University	Tensor Compression for Massive MIMO Front Haul via Sparse Tucker Approximation
15:45-16:05	Coffee Break	
16:05-17:20	Session Chair: Guangjing Song	
16:05-16:30	Xiongjun Zhang Central China Normal University	Noisy Nonnegative Tucker Decomposition with Sparse Factors and Missing Data
16:30-16:55	Miaomiao Cheng Capital Normal University	Exploiting Scene Graph for Prompting Vision-Language Models
16:55-17:20	Ye Liu South China University of Technology	Efficient Multi-View Clustering with Anchor-wise and Class- wise Alignments
18:00-21:00	Banquet	
End of the first day		

<i>30 December 2023</i>		
09:00-10:40	Session Chair: Weiyang Ding	
09:00-09:25	Xile Zhao University of Electronic Science and Technology	New Continuous Representation for Multi- Dimensional Data Recovery
09:25-09:50	Chao Wang Southern University of Science and Technology	Towards Robust Hyperspectral Unmixing Against Non-uniform Spectral Sampling
09:50-10:15	Zihao Wang Hunan University	An Inexactly Accelerated Algorithm for Nonnegative Tensor CP Decomposition with the Column Unit Constraints
10:15-10:40	Zhaochen Zhu Zhejiang Gongshang University	Tensor-Enhanced Methodologies in Three- Dimensional Variational Data Assimilation
10:40-10:55	Coffee Break	
10:55-12:10	Session Chair: Michael Ng	
10:55-11:20	Yimin Wei Fudan University	Matrix Decompositions of Dual Matrices and Their Applications
11:20-11:45	Lubin Cui Henan Normal University	A Projection Method Based on Discrete Normalized Dynamical System for Computing the C- eigenpairs of a Piezoelectric Tensor
11:45-12:10	Zhuo-Heng He Shanghai University	Some Quaternion Tensor Decompositions and Their Applications
12:10-12:15	Closing Remarks	

Organizers:

Michael Ng (HKBU, MATH)

Junjun Pan (HKBU, MATH)
