

Workshop on Learning and Computational Science

(13 Mar 2026–15 Mar 2026)



ORGANIZING COMMITTEE

Ji Hui

National University of Singapore

Youzuo Lin

The University of North Carolina at Chapel Hill

Yifei Lou

The University of North Carolina at Chapel Hill

Weiqing Ren

National University of Singapore

Hongkai Zhao

Duke University



Jointly organized with the Centre for Data Science and Machine Learning (CDML) at the National University of Singapore, the School of Data Science at The University of North Carolina at Chapel Hill (UNC), and the Department of Mathematics at Duke University.

Venue

IMS Executive Seminar Room

Bock S17, Level 3

10 Lower Kent Ridge Rd Singapore 119076

For more information: https://ims.nus.edu.sg/events/learning_compsci

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Friday, 13 March 2026

Time	Title	Speaker
0840–0850	Registration	
0850–0900	Opening Remarks	Zuowei Shen <i>Institute for Mathematical Sciences, Singapore</i>
0900–0940	What can One Expect when Training Neural Networks to Solve PDEs?	Hongkai Zhao <i>Duke University, USA</i>
0940–1020	AI for Scientific Discovery: Learning Beyond Data in Computational Wave Imaging	Youzuo Lin <i>University of North Carolina at Chapel Hill, USA</i>
1020–1040	Group Photo & Tea Break	
1040–1120	Towards Large Scientific Learning Models with In-Context Operator Networks (ICON)	Liu Yang <i>National University of Singapore, Singapore</i>
1120–1200	A Systems-Level Environment for Scientific Computing, Coding and Visualization	David Adalsteinsson <i>University of North Carolina at Chapel Hill, USA</i>
1200–1400	Lunch Break	
1400–1440	Moving Artificial Intelligence Algorithms for Pathology Closer to the Clinic by Addressing Technical Barriers to Scale	Iain Carmichael <i>University of North Carolina at Chapel Hill, USA</i>
1440–1520	Wasserstein Gradient Flow of Maximum Mean Discrepancy with Energy Kernel	Lihan Wang <i>National University of Singapore, Singapore</i>
1520–1540	Tea Break	
1540–1620	Expectation-enforcing Strategies for Repeated Games	Alex McAvoy <i>University of North Carolina at Chapel Hill, USA</i>
1620–1700	Gromov-Wasserstein Problem: Non-convexity, Semidefinite Relaxations, and Gradient Flows	Yongsheng Soh <i>National University of Singapore, Singapore</i>
1700–1740	Accelerate Neural Operators by Quantum Computing	Xiu Yang <i>Lehigh University, USA</i>

Saturday, 14 March 2026		
Time	Title	Speaker
0900-0940	Adapting Noise to Data by Quantile Learning	Gabriele Steidl <i>Technische Universität Berlin, Germany</i>
0940-1020	Preparing for Catastrophe in a Changing World: The Role of Data Science and Machine Learning in the (re)Insurance Sector	Zeff Harrison <i>University of North Carolina at Chapel Hill, USA</i>
1020-1040	Tea Break	
1040-1120	Steering Large Language Models: A Geometric and Control-Theoretic Approach	Minh Tan Nguyen <i>National University of Singapore, Singapore</i>
1120-1200	Seeing the Invisible with Medical Imaging and Data Science: Challenges and Opportunities	Yueh Lee <i>University of North Carolina at Chapel Hill, USA</i>
1200-1400	Lunch Break	
1400-1440	A General Framework for Group Sparsity in Hyperspectral Unmixing Using Endmember Bundles	Yifei Lou <i>University of North Carolina at Chapel Hill, USA</i>
1440-1520	Self-supervised In-context Operator Learning on the Probability Measure Space	Rongjie Lai <i>Purdue University, USA</i>
1520-1540	Tea Break	
1540-1620	O(k)-Equivariant Dimensionality Reduction on Stiefel Manifolds	Harlin Lee <i>University of North Carolina at Chapel Hill, USA</i>
1620-1700	On the Accuracy of Tensor Transfer Method for Open Quantum Systems	Zhenning Cai <i>National University of Singapore, Singapore</i>
1830-2030	<u>Conference Dinner (by invitation only)</u> AH YAT SEAFOOD (TURF CITY) 阿一海鲜 401 Havelock Road #03-00 Singapore 169631	
Sunday, 15 March 2026		
Time	Title	Speaker
	Free Discussion	

This schedule is accurate as of 12 Mar 2026 and is subjected to changes.