Workshop on Formal Proofs and Lean
(22 Apr–26 Apr 2024)

ORGANIZING COMMITTEE

Huanchen Bao
National University of Singapore

Jiajun Ma
Xiamen University and Xiamen University Malaysia

Shanwen Wang
Renmin University of China

Liang Xiao
Peking University

Lei Zhang
National University of Singapore

Venue

Department of Mathematics
Block S17, Lvl 04, Room 06
10 Lower Kent Ridge Road
Singapore 119076

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

Jointly Organized by

NUS National University of Singapore | Department of Mathematics, Faculty of Science

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新基石科学基金会 NEW CORNERSTONE SCIENCE FOUNDATION

	Time	Title Speaker
Monday 22 April 2024	09:15–09:30	Registration
	09:30–10:30	Proving as Programming Ilya Sergey *National University of Singapore, Singapore*
	10:30–10:45	Short Break
	10:45–:1145	Constructing custom thermodynamics using deep learning Qianxiao Li *National University of Singapore, Singapore*
	11:45–13:30	Lunch Break
	13:30–14:30	Colloquium Talk Why formalise mathematics? Kevin Buzzard *Imperial College London, UK*
	14:30–15:00	Short Break
	15:00–15:30	*Student Presentation* Learning Mathematics with Lean Bichang Lei & Yichang Tao *Renmin University of China, China*
	15:30–17:30	Discussion

	Time	Title Speaker
Tuesday 23 Apr 2024	13:30–14:30	Discussion
	14:30–15:00	*Student Presentation* Small Scale Reflection for the Working Lean User Vladimir Gladshtein *National University of Singapore, Singapore*
	15:00–15:30	*Student Presentation* Towards the formalisation of Coxeter combinatorics Clarence Chew, Jing Quan Chong, MengZhou Sun, Yutong Wang *National University of Singapore, Singapore*
	15:30–17:30	Discussion

Wednesday 24 April 2024	Time	Title Speaker
	09:30–10:30	Mathematical Formalization for Applied Mathematics Zaiwen Wen *Peking University, China*
	10:30–10:45	Short Break
	10:45–:1145	Programs with Proofs and Meta-Programming in Lean Siddhartha Gadgil *IISc India, India*
	11:45–13:30	Lunch Break
	Venue for the afternoon: LT34	
	13:30–14:30	AI for Mathematics: Goals, Plans and Tools Bin Dong, Guoxiong Gao, Haocheng Ju *Peking University, China*
	14:30–15:00	Short Break
	15:00–15:30	*Student Presentation* Recent Progress on Mathlib4 Semantic Search Haocheng Ju & Guoxiong Gao *Peking University, China*
	15:30–17:30	Discussion

Thursday 25 April 2024	Time	Title Speaker
	09:30–10:30	Formalizing Ramification Groups in Lean Jiedong Jiang *Peking University, China*
	10:30–10:45	Short Break
	10:45–:1145	The knotted pizza Ashvni Narayanan *University of Sydney, Australia*
	11:45–13:30	Lunch Break
	13:30–14:30	Formalising Fermat Kevin Buzzard *Imperial College London, UK*
	14:30–15:00	Short Break
	15:00–15:30	*Student Presentation* An AI-based approach to improving interactive theorem proving environment Anjie Dong *Peking University, China*
	15:30–17:30	Discussion

	Time	Title Speaker
Friday 26 April 2024	09:30–10:30	Formalisation of Combinatorics Bhavik Meht *University of Cambridge, UK*
	10:30–10:45	Short break
	10:45–:1145	Formalizing local fields in Lean Filippo Nuccio *Université Jean Monnet, France*
	11:45–13:30	Lunch Break
	13:30–14:30	Mathematical AI for Molecular Sciences Kelin Xia *Nanyang Technological University, Singapore*
	14:30–15:00	Short Break
	15:00–17:30	Discussion

This schedule is accurate as of 15 April 2024 and subjected to changes.