

iHM talks:		date	time	Name	Topic	Optional URL etc.
Tue	21.5.	15:00	James Davenport	Proving an execution of an algorithm correct	https://doi.org/10.1007/978-3-01-42953-4_17	
Wed	22.5.	15:00	Nicolas Thiéry	Categories, axioms, constructors in SageMath: Modeling mathematics for fun and profit		
Thu	23.5.	14:00	Michal Karararakis	Formalizing DeJong's theorem (Number theory)		
Fri	24.5.	15:00	Andrea Kohlhase	Eye Tracking for Math		
Mo	27.5.	15:00	Reed Mullerix	Cubical Type Theory for the Low-Dimensional Mathematician		
Tue	28.5.	15:00	Emily Rehl	Formalizing ω -category theory in the Risc proof assistant	https://familynet.github.io/yoneda-CFP-2024/	
Wed	29.5.	15:00	Tom de Jong	Formalization of HoTT equivalences: 3- ω -2 and definitional equality	https://github.com/tdjones/2024-12-05-8-practical-technique-for-proving-thm-3-misc-is-an-example/	
Thu	30.5.	15:00	no talk	Public Holiday (Fronleichnam = Corpus Christi)		
Fri	31.5.	15:00	Claudio Sacerdoti Coen	Indexing and Retrieval in a heterogeneous Formal Library		
Mo	3.6.	15:00	Chris Lan	Adventures in Correct-by-Construction Proof Engineering		
Tue	4.6.	15:00	Hans-Ji Mohani	Formal Verification and Synthesis of Polynomial Programs using Algebra-Geometry	https://doi.org/10.1145/3586052	
Wed	5.6.	15:00	Juan Mézaro	Theory-oriented mathematics		
Thu	6.6.	15:00	Miry Meiri and Pietro Sabelli	Peculiarities of the Metamath Foundation for Formal Mathematics		
Fri	7.6.	15:00	Cipriano Cliffo	A categorical account of the solid node		
Mo	10.6.	11:00	Kevin Buzzard	Formalizing Formal I (informal lecture)		
Mo	10.6.	15:00	Sina Hazratpour	Report on Polynomial Factors Formalization	https://github.com/sin/Poly/	
Tue	11.6.	11:00	Kevin Buzzard	Formalizing Formal II (informal lecture)		
Tue	11.6.	15:00	Valeria de Paiva	AI tools for Better Math		
Wed	12.6.	11:00	Kevin Buzzard	Formalizing Formal III (informal lecture)		
Wed	12.6.	15:00	Davide Tropa	Discourses for Formal Mathematics		
Thu	13.6.	11:00	Kevin Buzzard	Formalizing Formal IV (informal lecture)		
Thu	13.6.	15:00	Dagur Aegisdóttir	Condensed mathematics in Metacoq		
Fr	14.6.	11:00	Kevin Buzzard	Formalizing Formal V (informal lecture)		
Fr	14.6.	15:00	Sina Hazratpour	Linear Algebra Game in Lean	https://github.com/sin/lean4-linear-algebra/	
17.-21.6 no PFM Seminar						
Mo	17.6.	9:00		Welcome and Orga		
17.6.	9:30	van Doorn	Towards a formalized proof of Carleson's theorem			
17.6.	10:10	Coffee break				
17.6.	10:40	Farmer	An Alternative Approach to Formal Mathematics that Prioritizes Communication over Certification			
17.6.	10:40	Farmer	Comments on the formalization and automation of foundational theories from the point of view of LogKey			
17.6.	11:20	Benzmüller				
17.6.	12:00	Lunch				
17.6.	13:30	Who am I	All participants present their research/workshop interests in 2 min			
17.6.	14:30	Workgroup 1	A) Formalizing Carleson (basement), B) Math activities for the general public (plenary)			
17.6.	16:30	Workgroup 2	A) Bootis Curious Inference (theplace) B) HoTT Lean (plenary)			
18:00		Get-together	Pretzels and Beer in the Garden (weather permitting)			
Tue	18.6.	9:00	Kevin Buzzard	Capturing mathematical equality		
18.6.	9:40	Cyrl Cohen	Building Measure Theory using Hierarchy Builder			
18.6.	10:20	Coffee break				
18.6.	10:50	Lawrence Paulson	Formalizing Advanced Mathematics in Isabelle/HOL			
18.6.	11:30	Yves Bertot	Reconciling Type theory with the use of a single type of numbers for mathematical education at introductory levels			
18.6.	12:10	Lunch				
18.6.	14:00	Workgroup1	A) Applications of Proof assistants in teaching (plenary), B) Formalizing Carleson (basement)			
18.6.	16:00	Cake Break				
18.6.	16:30	Workgroup2	A) Proving Hierarchy Builder (plenary), B) HoTT Lean (theplace) C) Choosing (basement)			
Wed	19.6.	9:00	Natarajan Shankar	Beautiful Formalizations and Proofs		
19.6.	9:40	Jacques Carette	Unavoidable Mathematics			
19.6.	10:20	Coffee Break				
19.6.	10:50	Georges Gonthier	Programming Mathematics: Tools and Challenges			
19.6.	11:30	Patrick Massot	From informal to formal and back			
19.6.	12:10	Lunch				
19.6.	14:00	Panel discussion	How do we formalize (most of) mathematics?	Panel discussion on Wednesday		
19.6.	16:00	Cake Break				
19.6.	16:30	Workgroup2	A) How to expand the role of formal mathematics in mathematical practice (theplace) B) Differences between proofs of programs and proofs in mathematics (plenary), C) Hierarchy Builder (basement); D) HoTT in Lean (2. floor seminar room)			
Thu	20.6.	9:00	Abdulaziz	Formalizing the Theory of Combinatorial Optimisation		
20.6.	9:40	Francois Rabier	HOL-Dependent Types + Subtyping			
20.6.	10:20	Coffee Break				
20.6.	10:50	Katja Beroš/Jure Tasiak	Lean-HoG: Incorporating a database of graphs into a proof assistant			
20.6.	11:30	Johan Commelin	Condensed Type Theory			
20.6.	12:10	Lunch				
20.6.	14:00	Workgroup1	A) Polynomials in Lean (theplace), B) Raising Academic recognition for Formalized Implementations (plenary), C) Hierarchy builder (basement), D) HoTT Lean (2. floor seminar)			
20.6.	16:00	Cake Break				
20.6.	16:30	Workgroup2	A) Formal to informal and back (NLP, NLU, CNL, Autoformalization ...) (basement) B) Publication norms for formalized math (plenary) C) Understanding practical differences between theorem prover type systems (theplace)			
Fr	21.6.	9:00	Jeremy Avigad	Verifying elliptic curve computations on blockchain		
21.6.	9:40	Rob Lewis	Teaching Lean vs. teaching with Lean			
21.6.	10:20	Coffee Break				
21.6.	10:50	Claudio Sacerdoti Coen	A taste of ELP?			
21.6.	11:30	Wojciech Nawrocki	Extending the Lean user interface with widgets (a tutorial)			
21.6.	12:10	Lunch				
21.6.	14:00	Workgroup1	A) HoTT Lean (2nd floor seminar room) B) How to make formal logic more palatable to mathematicians practitioners (plenary) C) Theory Builder (theplace)			
21.6.	16:00	Cake Break				
21.6.	16:30	Workgroup2	A) Polynomials in Lean (theplace)			
Workgroup Proposals:						
			Proposer	Working Title (description)		
Coding	*	11	Steve Awodey	HoTT Lean (a project for HoTT formalizations in Lean) https://github.com/steveawodey/hoTT_in_lean	mo2	plenary
Disc	1	13	Michael Kohlhase	Raising Academic recognition for Formalizations/Implementations	thu1	
Disc	1	11	Bill Farmer	How to expand the role of formal mathematics in mathematical practice.	wed2	
Disc	1	5	Bill Farmer	How to make formal logic more palatable to mathematicians practitioners	fri1	
Disc	1	20	Christine Paulin-Mohring	Differences between proofs of programs and proofs in mathematics. Do we need different tools? should we care about the computational content of definition and proofs in mathematics?	wed2	
Work on	-100	17	Jeremy Avigad	Designing activities to introduce the general public to interactive theorem proving (for example at MathFest)	mo1	plenary
Disc/Ex	->2	19	Mohammad Abooduzic	Understanding practical differences between theorem prover type systems - Formalising simple case studies that highlight the differences	thu2	
Coding	winfy	12	Cyrl Cohen	Proving Hierarchy Builder from Coq to another proof assistant (Lean?)	Tue2, Wed1, Thu1, Fri1	https://github.com/CohenCyrl/mathB4treeh3
Coding	winfy+1	8	Floris van Doorn	Formalizing Carleson's theorem	mo1	basement
Coding/Disc	->2	5	Christoph Benz Müller	How to automate Bootis Curious Inference (as an example for intelligent cut-introduction)?	mo2	theplace
Coding	2	8	James Davenport	Polynomial arithmetic in Lean	thu1	
Disc	->2	8	Angeliki Koutroukou-Argyraki	Choosing what mathematical areas/theorems to formalise and how this could be approached, both as an individual choice and as a community choice: how to coordinate and decide on library expansion goals and strategies.	tue2	
Disc/Demo	->2	28	Patrick Massot	Applications of Proof assistants in teaching	Tue1	
Disc/Demo	->2	16	Patrick Massot	Formal to informal and back (NLP, NLU, CNL, Autoformalization ...)	Thu2	
Disc	1	22	Rob Lewis	Publication norms for formalized math	thu2	
Mo	24.6.	15:00	Mario Carneiro	Impromptu chat about HB in Lean		
Tue	25.6.	15:00	Mirna Džamonja	Calculating ordinal invariants - can you do better than a human?		

