

Workshop programme

Please note: This workshop has reached full capacity, and registration is now closed. It is unfortunately not possible to accommodate unregistered walk-ins.

Monday, September 15

11:00 – 12:00	Arrival and registration
12:00 – 13:00	<i>lunch</i>
13:00 – 13:10	Welcome by the Lorentz Center
13:10 – 13:30	Introduction by the organizers
13:30 – 14:30	Emily Riehl: A new paradigm for mathematical proof?
14:30 – 15:00	<i>coffee</i>
15:00 – 16:00	Michael Barany: Social studies of mathematics
16:00 – 17:00	Albert Jiang: AI for theorem proving—an engineer's notes on implementation details
17:00 – 18:30	<i>welcome reception</i>

Tuesday, September 16

09:30 – 10:45	Walter Dean: On the methodology of benchmarks Kevin Buzzard: Problematic proofs Catarina Dutilh Novaes: Joint epistemic actions in mathematics and mechanisation
10:45 – 11:15	<i>coffee</i>
11:15 – 12:00	Panel discussion chaired by Ursula Martin Panelists: presenters and Sophie Morel
12:00 – 13:30	<i>lunch</i>
13:30 – 14:30	Fabian Glöckle: Search Reason Recombine
14:30 – 15:00	<i>coffee</i>
14:50	<i>deadline</i> for submitting questions
15:00 – 15:20	Plenary selection of questions for breakout sessions
15:25 – 16:20	Parallel breakout sessions
16:20 – 17:00	Plenary summary and closing discussion

Wednesday, September 17

09:30 – 10:45	Heather Macbeth: Let the computers do the computation! Simon DeDeo: Inhuman Proofs and Human Reasons Rob Lewis: What do formal mathematicians do?
10:45 – 11:15	<i>coffee</i>
11:15 – 12:00	Panel discussion chaired by Antoine Chambert-Loir Panelists: presenters and Michael Barany
12:00 – 13:30	<i>lunch</i>
13:30 – 14:30	Jeremy Avigad: Is Mathematics Obsolete? (with lessons from an American folk tale)
14:30 – 15:00	<i>coffee</i>
14:50	<i>deadline</i> for submitting questions
15:00 – 15:15	Plenary selection of questions for breakout sessions
15:20 – 16:20	Parallel breakout sessions
16:20 – 17:00	Plenary summary and closing discussion
18:15 –	<i>boat trip and workshop dinner</i>

Thursday, September 18

09:30 – 10:45	Talia Ringer: Big, Pretty Math Andreas Stylianides: What Should Students Be Learning When Machines Can Do the Proofs? Massimiliano Gubinelli: Proofs, programs and stories
10:45 – 11:15	<i>coffee</i>
11:15 – 12:00	Panel discussion chaired by Bryna Kra Panelists: presenters and Slava Gerovitch
12:00 – 13:30	<i>lunch</i>
13:30 – 14:30	Michael Harris: Why do we ask ‘why do we do mathematics?’
14:30 – 15:00	<i>coffee</i>
14:50	<i>deadline</i> for submitting questions
15:00 – 15:15	Selection of questions for breakout sessions
15:20 – 16:20	Parallel breakout sessions
16:20 – 17:00	Summary and closing discussion

Friday, September 19 (note the starting time!)

09:00 – 10:00	Tim Gowers: Will mathematics exist in 2035?
10:00 – 10:30	<i>coffee</i>
10:30 – 11:20	Breakout sessions: What do we do with what we have learnt?
11:20 – 11:50	Summary and workshop closing
11:50 – 12:50	<i>lunch</i>

The workshop is followed by a public symposium, to which all participants are invited.

Public symposium in Gorleaus Building (~10 min from Lorentz Center), room CM 1.26.

See also <https://sites.google.com/view/mechanicalmath> (workshop participants do *not* need to register).

12:50 – 13:10	Doors open
13:10 – 13:20	Welcome
13:20 – 14:10	Thomas Hubert: AlphaProof: from the Lab into your Hands
14:10 – 15:00	Stephanie Dick: After Math: historical perspectives on automated intelligence
15:00 – 15:30	<i>coffee</i>
15:30 – 16:20	Akshay Venkatesh: What do we tell our students about AI?
16:20 – 17:10	Panel discussion chaired by Robbert Dijkgraaf
17:10 – 18:00	Reception