

## “School on Formal Mathematics”

May 13 - 17, 2024

organized by

Michael Kohlhase, Jacques Carette, Valeria de Paiva, Josef Urban

*Time measurement: CEST*

### • Monday, May 13

08:30 - 08:55	<i>Arrival and Registration</i>
08:55 - 09:00	<i>Introduction by Michael Kohlhase and Welcome by the HIM Team</i>
09:00 - 09:25	<b>Yannick Forster</b> <i>System Introductions I - Coq</i>
09:25 - 09:50	<b>Sam Owre</b> <i>System Introductions I - PVS</i>
09:50 - 10:15	<b>Freek Wiedijk</b> <i>System Introductions I - HOL</i>
10:15 - 10:40	<b>Mario Carneiro, Floris van Doorn</b> <i>System Introductions I - Lean</i>
10:40 - 11:00	<i>Coffee break</i>
11:00 - 11:25	<b>Manuel Eberl</b> <i>System Introductions II - Isabelle</i>
11:25 - 11:50	<b>Michael Kohlhase</b> <i>System Introductions II - sTeX/ALeA</i>
11:50 - 12:15	<b>Peter Koepke</b> <i>System Introductions II - Naproche</i>
12:15 - 12:40	<b>Andrej Bauer, Guillaume Allais</b> <i>System Introductions II - Agda/Idris</i>
12:40 - 14:15	<i>Lunch break</i>
14:15 - 16:00	<b>Formalization Lab I</b> <i>getting your hands dirty in groups</i>
16:00 - 16:30	<i>Coffee break</i>

16:30 - 18:00	<b>Formalization Lab II</b> <i>getting your hands dirty in groups</i>
afterwards	<i>Get-Together</i> <i>Pretzels and Drinks in the Garden of the Institute - weather permitting</i>

• **Tuesday, May 14**

09:00 - 09:10	<i>Planning</i>
09:10 - 09:50	<b>Josef Urban</b> <i>Theorem Proving and AI</i>
09:50 - 10:30	<b>Michael Kohlhase</b> <i>ALeA - Flexiformal Education</i>
10:30 - 11:10	<i>Group Photo and Coffee break</i>
11:10 - 11:50	<b>Andrej Bauer</b> <i>Constructive Mathematics - How to not believe in the Law of Excluded Middle</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 16:00	<b>Practical Formalization</b> <i>getting your hands dirty in groups</i>
16:00 - 16:30	<i>Coffee break</i>
16:30 - 18:00	<b>Practical Formalization</b> <i>getting your hands dirty in groups</i>

• **Wednesday, May 15**

09:00 - 09:10	<i>Planning</i>
09:10 - 09:50	<b>Freek Wiedijk</b> <i>More on HOL Light</i>
09:50 - 10:30	<b>Sam Owre</b> <i>Modularity in PVS</i>
10:30 - 11:10	<i>Coffee break</i>
11:10 - 11:50	<b>Mario Carneiro</b> <i>TBD</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 16:00	<b>Practical Formalization</b> <i>getting your hands dirty in groups</i>
16:00 - 16:30	<i>Coffee break</i>
16:30 - 18:00	<b>Practical Formalization</b> <i>getting your hands dirty in groups</i>

• **Thursday, May 16**

09:00 - 09:10	<i>Planning</i>
09:10 - 09:50	<b>Freek Wiedijk</b> <i>Even more on HOL Light</i>
09:50 - 10:30	<b>Guillaume Allais</b> <i>Syntaxes for Binding and their Semantics</i>
10:30 - 11:10	<i>Coffee break</i>
11:10 - 11:50	<b>Mario Carneiro and Andrej Bauer</b> <i>Universes in Set/Type Theory</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 16:00	<b>Practical Formalization</b> <i>getting your hands dirty in groups</i>
16:00 - 16:30	<i>Coffee break</i>
16:30 - 18:00	<b>Practical Formalization</b> <i>getting your hands dirty in groups</i>

• **Friday, May 17**

09:00 - 09:30	<b>Peter Koepke</b> <i>FOL from a Naproche perspective</i>
10:00 - 11:00	<b>LLM Talk at Computer Science</b>
11:10 - 11:50	<b>Steve Awodey</b> <i>What is HOTT?</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 16:00	<b>Practical Formalization</b> <i>getting your hands dirty in groups</i>
16:00 - 16:30	<i>Coffee break</i>
16:30 - 18:00	<b>Practical Formalization</b> <i>getting your hands dirty in groups</i>