Automated mathematics: Integrating proofs, algorithms and data

Schedule – Monday, October 2

9:00–10:00	Welcome & Introductions[1]
10:00–10:30	Coffee[1]
10:30–12:00	Task planning[1]
12:15–13:00	Lunch[2]
14:00–15:30	Group work[3]
15:30–16:00	Coffee & Cakes[2]
16:00–17:30	Group work[3]
17:30–18:00	Show & Tell[1]
18:00–19:00	Dinner[2]

[1] Lecture Hall Karlsruhe
[2] Dining hall
[3] Anywhere

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Schedule – Tuesday, October 3

9:00–9:30	Jacques Carette: Learning from Invisible Mathematics[1]
9:30–10:00	Valeria de Paiva: Mathematical Concepts from Text[1]
10:00–10:30	Coffee[1]
10:30–11:00	Michael Kohlhase: The Tetrapod Model of Mathematical Knowledge[1]
11:00–11:20	Tobias Nipkow: Isabelle's Archive of Formal Proofs[1]
11:20–11:40	Katja Berčič: A curated collection of mathematical datasets[1]
12:15–14:00	Lunch[2]
14:00–15:30	Group work[3]
15:30–16:00	Coffee & cakes[2]
16:00–10:00	Group work[3]
17:00–18:00	Show & tell[1]

[1] Lecture Hall Saarbrücken
[2] Dining hall
[3] Anywhere

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Schedule – Wednesday, October 4

9:00–9:30	Josef Urban: Alien Coding – Learning synthesis of OEIS sequences[1]
9:30–10:00	Gilles Dowek: From the universality of mathematical truth to the interoperability of proof systems[1]
10:00–10:10	Claudio Sacerdoti Coen[1]
10:10–10:40	Coffee[1]
10:40–11:00	Dennis Müller: sTeX – A LaTeX Package and Ecosystem for Flexiformal Mathematics[1]
11:00–11:20	Edgar Costa: LMFDB – L-functions and modular forms database[1]
11:20–11:40	Alex Best: Formal verification of mathematical algorithms when the definitions are out of reach
11:40–12:10	Jan Goedgebeur: House of Graphs – A searchable database of interesting graphs and more
12:15–13:00	Lunch[2]
13:10–13:15	Group photo (garden)
13:15–15:30	Excursion
15:30–16:00	Coffee & cakes[2]
16:00–10:00	Excursion / Group work[3]
17:30–18:00	Show & tell[1]
18:00–19:00	Dinner[2]

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Schedule – Thursday, October 5

9:00–9:30	Natarajan Shankar: Extracting Efficient Code from Formal Definitions[1]
9:30–9:50	Matej Petković: Machine-learnable Data Sets for Formalized Mathematics (MLFMF)[1]
9:50–10:20	Coffee[1]
10:20–10:30	Valeria de Paiva: Three prototypes[1]
10:30–10:50	Dimitri Leemans: Towards a centralized system for mathematical objects[1]
10:50–11:10	Jure Taslak: Enumerion[1]
11:10–11:30	Kiran Gopinathan: Proof Repair[1]
11:30–11:50	Mario Carneiro: mm0[1]
11:50–12:00	James Boyd[1]
12:15–14:00	Lunch[2]
14:00–15:30	Group work[3]
15:30–16:00	Coffee & cakes[2]
16:00–17:00	Group work[3]
17:00–18:00	Show & tell[1]

[1] Lecture Hall Saarbrücken
[2] Dining hall
[3] Anywhere

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Schedule – Friday, October 6

9:00–9:20	Christoph Benzmüller: Short proofs[1]
9:20–9:40	Makarius Wenzel: Isabelle as System Platform for the Archive of Formal Proofs (AFP)[1]
9:40–9:50	Catherine Dubois: (Re)Verification of proofs[1]
9:50–10:10	James Davenport: Proving an Execution of an Algorithm correct[1]
10:10–10:30	Madalina Erascu: Understanding symmetries of bin packing problems occurring in application deployment in the Cloud, is invariant theory of finite groups a good framework?[1]
10:30–11:00	Coffee[1]
11:00–12:00	Conclusion[1]
12:00–--	Lunch and departures[2]

[1] Lecture Hall Saarbrücken
[2] Dining hall
[3] Anywhere