

Program of the Humboldt-Kolleg 'Proof', Bern, 9-13 September 2013

Monday, September 9

14:00 *Opening Address by Prof. Dr. Martin Täuber, Rector of the University of Bern*

Chair: Godehard Link

14:15 – 15:00 **Volker Halbach** "*Provability, Self-Reference and Intensionality*"

15:00 – 15:45 **Jan von Plato** "*Saved from the Cellar: Gentzen's Shorthand Notes on Logic and Foundations*"

15:45 – 16:15 *Coffee break*

16:15 – 17:00 **Stefania Centrone** "*Rigorous Proofs and the Ban on the 'metábasis eis állo génos' in B. Bolzano*"

17:00 – 17:30 *Coffee break*

17:30 – 18:00 **Bahareh Afshari & Graham Leigh** "*Closure Ordinals for the Modal μ -Calculus*"

18:00 – 18:30 **Takako Nemoto** "*Ramified Analysis Revisited: A Refinement of Determinacy Hierarchy*"

Tuesday, September 10

Chair: Andrea Cantini

09:15 – 10:00 **Roman Murawski** "*On Proof in Mathematics – Philosophical Remarks*"

10:00 – 10:30 *Coffee break*

10:30 – 11:15 **Kosta Dosen** "*Proof Theory and Deduction Theory*"

11:15 – 12:00 **Gerhard Jäger** "*Operational Set Theory with Classes*"

Lunch break

Chair: Wolfram Pohlers

14:00 – 14:45 **Michael Rathjen** "*Calibrating the Proof Power of Type Theories*"

14:45 – 15:30 **Thomas Strahm** "*Unfolding Schematic Systems: a Survey*"

15:30 – 16:00 *Coffee break*

16:00 – 16:45 **Stan Wainer** "*A Hierarchy of Ramified Theories Extending PRA*"

16:45 – 17:30 **Giuseppe Rosolini** "*Intrinsic Sobriety*"

17:30 – 18:00 *Coffee break*

18:00 – 18:45 **Dana Scott** "*A Stochastic Lambda-Calculus*"

Wednesday, September 11

Chair: Wilfried Buchholz

09:15 – 10:00 **Laura Crosilla** "*Philosophical Reflections On Constructive Mathematics*"

10:00 – 10:30 *Coffee break*

10:30 – 11:15 **Hajime Ishihara** "*Classical Propositional Logic and Decidability of Variables in Intuitionistic Propositional Logic*"

11:15 – 12:00 **Giovanni Sambin** "*Benefits of a Minimalist Foundation*"

Lunch break

Wednesday (Afternoon), September 11

Chair: Peter Aczel

- 14:00 – 14:45 **Ulrich Berger** "*How Constructive is Abstract Mathematics?*"
14:45 – 15:30 **Josef Berger** "*Higman's Lemma and Dickson's Lemma are equivalent*"
15:30 – 16:00 *Coffee break*
16:00 – 16:45 **Steve Awodey** "*Advances in Univalent Foundations*"
16:45 – 17:30 **Thierry Coquand** "*On the Computational Content of the Axiom of Univalence*"
17:30 – 18:00 *Coffee break*
18:00 – 18:45 **Erik Palmgren** "*Remarks on Dependently Typed First Order Logic*"

Thursday, September 12

Chair: Pavel Pudlak

- 09:15 – 10:00 **Helmut Schwichtenberg** "*Proofs and Computations*"
10:00 – 10:30 *Coffee break*
10:30 – 11:15 **Vivek Nigam** "*An Extended Framework for Specifying and Reasoning about Proof Systems*"
11:15 – 12:00 **Ulrich Kohlenbach** "*On the Finitary Content of non-effective Proofs in non-linear Analysis*"

Lunch break

Chair: Marco Benini

- 14:00 – 14:45 **Georges Gonthier** "*A Computer-Checked Proof of the Odd Order Theorem*"
14:45 – 15:30 **Russell O'Connor** "*My 10 years of Computer Verified Mathematics or: How I Learned to Stop Worrying and Love Constructive Mathematics*"
15:30 – 16:00 *Coffee break*
16:00 – 16:45 **Matthias Baaz** "*Towards a Proof Theory of Analogical Reasoning*"
16:45 – 17:30 **Peter Koepke** "*Formal Modeling of Reasoning in Natural Language Proofs*"
17:30 – 18:00 *Coffee break*
18:00 – 18:30 **Enno Aufderheide** "*Funding Opportunities throughout the Academic Career – the Humboldt-Foundation Programs*"

Social dinner at the [Restaurant Dählhölzli](#).

Friday, September 13

Chair: Pierluigi Minari

- 09:15 – 10:00 **Assia Mahboubi** "*Automated and (Formally) Certified Proofs of Summation Formulae*"
10:00 – 10:30 *Coffee break*
10:30 – 11:15 **Ioana Leustean** "*Linearity Issues in Lukasiewicz logic*"
11:15 – 12:00 **Etienne Lozes** "*Separation logic, its Magic Wand, and some Magic Tricks*"