

# PCC 2016 Programme

Mathematical Institute of LMU, Theresienstr. 37–39, 80804 Munich

## Thursday May 5: day-long special session dedicated to Ulrich Berger

A027 (Ground floor of the mathematical institute, Block A)

- 9:00 - 10:00    Opening  
                  Invited Speaker 1: Dag Normann  
                  Revisiting Transfinite Types
- 10:00 - 10:30    Coffee Break
- 10:30 - 12:30    Mizuhito Ogawa  
                  Decidability by two semi-algorithms  
  
                  Dieter Spreen  
                  Bitopological spaces and the continuity problem  
  
                  Birgit Elbl  
                  Decomposing a labelled sequent calculus for the logic of subset spaces  
  
                  Fredrik Nordvall Forsberg  
                  A Type Theory for Comprehensive Parametric Polymorphism
- 12:30 - 14:30    Lunch Break (coffee being served at 14h)
- 14:30 - 16:20    Invited Speaker 2: Paulo Oliva  
                  Modified bar recursion - 15 years on  
  
                  Thomas Powell  
                  The computational content of Zorn's lemma  
  
                  Anton Setzer  
                  Schemata for Proofs by Coinduction
- 16:20 - 16:50    Coffee Break
- 16:50 - 18:10    Invited Speaker 3: Thomas Streicher  
                  An effective Spectral Theorem for bounded self adjoint operators  
  
                  Lorenz Berger  
                  Modelling the human lung
- 19:30            Dinner at Schneider Bräuhaus, Tal 7, 80331 Munich  
                  which is very close to Marienplatz (reservation subject to registration)

## Friday May 6

A027 (Ground floor of the math institute, Block A), 9:00–10:00

B349 (3rd floor of the math institute, Block B), 10:00–18:00

- 9:00 - 10:00 Peter Schuster  
Eliminating Disjunctions by Disjunction Elimination  
Masahiko Sato  
Proof theory of the lambda calculus
- 10:00 - 10:30 Coffee Break
- 10:30 - 12:30 Thomas Piecha  
Atomic Systems in Proof-Theoretic Semantics  
Ernst Zimmermann  
Local confluence in Natural Deduction  
Rene Gazzari  
Pure Proofs  
Sam Sanders  
The unreasonable effectiveness of Nonstandard Analysis
- 12:30 - 14:30 Lunch Break (coffee being served at 14h)
- 14:30 - 16:30 Alessio Guglielmi  
Report on a 3-Year Project on Efficient and Natural Proof Systems  
Alessio Santamaria  
Substitution in Deep Inference via Atomic Flows  
David Sherratt  
Atomic Lambda Calculus and its connections with Sharing Graphs  
Andrea Aler Tubella  
Generalising Cut-Elimination through Subatomic Proof Systems
- 16:30 - 17:00 Coffee Break
- 17:00 - 18:00 Benjamin Ralph  
Decomposing First-Order Proofs using Deep Inference  
Lars Kristiansen  
On Subrecursive Representability of Irrational Numbers