

COLLOQUIUM LOGICUM 2004

September 17 - 19, 2004 - Heidelberg (Germany)

PROGRAM

The joint session with the DMV conference on Friday afternoon will be held in the Lecture Hall (Hörsaal) of the Historisches Seminar, Grabengasse 3-5 (in the historical center of Heidelberg). The Saturday and Sunday sessions will be held in the Mathematisches Institut, Im Neuenheimer Feld 288, Lecture Hall 2 (in the Neuenheim campus of the university).

Friday, September 17 (joint session with DMV conference - Lecture Hall Historisches Seminar)

- 14:25 - 15:15** **Ulrich Kohlenbach (TU Darmstadt):** *Applications of logic to nonlinear functional analysis*
15:15 Coffee
- 15:45 - 16:35** **Ralf Schindler (Universität Münster):** *Cardinal arithmetic and determinacy*
- 16:35 - 17:25** **Amador Martin-Pizarro (Humboldt-Universität Berlin):** *Supersimple fields*
- 17:25 - 18:15** **Peter Schuster (Universität München):** *On constructing completions*

Saturday, September 18 (Mathematisches Institut - Hörsaal 2 - INF 288)

- 9:00 - 10:00** **Janos A. Makowsky (Technion Haifa / ETH Zürich):** *50 years of the Spectrum Problem: History and new directions*
10:00 Coffee
- 10:30 - 12:30** **PhD-Colloquium**
- 10:30 - 11:30 Joost Joosten (University of Utrecht): *Worms, interpretations and proof strength*
- 11:30 - 12:30 Jan Reimann (Universität Heidelberg): *Hausdorff dimension, randomness, and entropy*
- 14:00 - 15:00** **Albert Atserias (Universitat Politècnica de Catalunya, Barcelona):** *The complexity of random 3-SAT: a survey and new results*
- 15:00 - 16:00** **Short Communications**
- 15:00 - 15:30 Patrick Braselmann and Peter Koepke (Universität Bonn): *A formal proof of the Gödel completeness theorem*
- 15:30 - 16:00 Peter Schuster (Universität München): *Algebra and geometry in first-order terms*
- 16:00 Coffee
- 16:30 - 17:30** **Short Communications (Parallel Sessions)**
Session A - INF 288, HS 2
- 16:30 - 17:00 Philipp Gerhardy (TU Darmstadt): *Strongly uniform bounds from semi-intuitionistic proofs*
- 17:00 - 17:30 Oscar M. Esquisabel (Universidad Nacional de La Plata): *The interaction between mathematics and logic in Leibniz*

Session B - INF 288, HS 1

- 16:30 - 17:00 Stefan Bold (Universiteit van Amsterdam): *A simple inductive argument to compute more Kleinberg sequences under the Axiom of Determinacy*
- 17:00 - 17:30 Gunter Fuchs (Universität Münster): *Degrees of rigidity for Souslin trees*

17:45 General Assembly of the DVMLG

Sunday, September 19 (Mathematisches Institut - Hörsaal 2 - INF 288)

9:00 - 10:00 S. Barry Cooper (University of Leeds): *Incomputability, fifty years after Alan Turing*

10:00 Coffee

10:30 - 11:30 Javier Legris (Academia Nacional de Ciencias de Buenos Aires): *The many faces of logicism. On the interrelations between symbolic logic and foundations of mathematics at the end of the 19th century*

11:30 - 13:00 Short Communications

11:30 - 12:00 Bjørn Kjos-Hanssen (University of Connecticut, Storrs) and Wolfgang Merkle (Universität Heidelberg): *Recent results on the complexity of the prefixes of random and DNR sequences*

12:00 - 12:30 Branimir Lambov (TU Darmstadt): *A generalization of a theorem of Matiyasevich*

12:30 - 13:00 Gyesik Lee (Universität Münster): *Large threshold for PA-independence*

13:00 Snacks

14:00 - 15:00 Andreas Weiermann (University of Utrecht): *Classifying the phase transition for independence results*