



International Conference on
Computability and Complexity in Analysis

**CCA
2003**

August 28–30, 2003, University of Cincinnati, USA

Preliminary Program

Thursday, August 28

- 08:10 Registration & Refreshments¹
08:40 Welcome Session²
Invited Talks
09:00 **Jack H. Lutz**, *Effective fractal dimensions*
09:45 **Iraj Kalantari**, *Density & Baire category in recursive topology*
10:30 Coffee Break
Contributed Talks
11:00 **Andrej Bauer and Alex Simpson**, *Locally non-compact spaces and continuity principles*
11:30 **Matthias Schröder**, *Spaces allowing type-2 complexity theory revisited*
12:00 **Daren Kunkle**, *Computability on spaces of integrable functions*
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- 12:30 Lunch Break
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- Invited Talk
02:00 **Vladik Kreinovich and Luc Longpré**, *Computational complexity and feasibility of data processing ...*
Contributed Talks
02:45 **Abbas Edalat and Dirk Pattinson**, *Initial value problems in domain theory*
03:15 **Daniel Silva Graça**, *Computability via analog circuits*
03:45 Coffee Break
04:15 **Elham Kashefi**, *Quantum domain theory – definitions and applications*
04:45 **Branimir Lambov**, *A two-layer approach to the computability and complexity of real functions*
05:15 Problem Session & Reception

Friday, August 29

- 08:30 Refreshments
Taft Lecture, Chair: Kenneth Meyer
09:00 **Klaus Weihrauch**, *Continuity in computable analysis*
Invited Talk
10:00 **Rodney G. Downey**, *Presentations of reals*
10:45 Coffee Break
Contributed Talks
11:15 **Xizhong Zheng and Robert Rettinger**, *h -Monotonically computable real numbers*
11:45 **Guohua Wu**, *Regular reals*
12:15 **Bjørn Kjos-Hanssen, André Nies and Frank Stephan**, *On a question of Ambos-Spies and Kučera*
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- 12:45 Lunch Break
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- Invited Talk
02:00 **Peter Hertling**, *Topological complexity of zero finding for continuous functions*
Contributed Talks
02:45 **Cristian S. Calude and Ludwig Staiger**, *Generalisations of disjunctive sequences*
03:15 **Douglas Cenzer and Jeffrey B. Remmel**, *Index sets for computable real functions*
03:45 Coffee Break
04:15 **Armin Hemmerling**, *Characterizations of the class Δ_2^{ta} over Euclidean spaces*
04:45 **Vasco Brattka**, *Effective Borel measurability and reducibility of functions*
07:00 Banquet

Saturday, August 30

- 08:30 Refreshments
Invited Talks
09:00 **Boris A. Kushner**, *The centenary of A.A. Markov, Jr.; His personality, his constructive mathematics*
09:45 **Douglas S. Bridges**, *First steps in constructive game theory*
10:30 Coffee Break
Contributed Talks
11:00 **Arthur W. Chou and Ker-I Ko**, *On the complexity of finding shortest paths in a two-dimensional domain*
11:30 **Martin Ziegler**, *Computable operators on regular sets*
12:00 Closing of the Conference
12:15 Lunch

¹ All refreshments and lunches in Room 736, Old Chemistry.

² All talks will be held in Room 755, Baldwin Hall.