6th Conference on
Real Numbers and Computers
November 15-17 2004, Schloß Dagstuhl, Germany
Preliminary program

Monday, November 15:

9:00  Opening of the conference
9:30  Stefan Schirra (invited talk), Real Numbers and Robustness in Computational Geometry
10:30 Coffee break
11:00 Sylvie Boldo, Bridging the gap between formal specification and bit-level floating-point arithmetic
11:30 Daumas, Melquiond, Generating formally certified bounds on values and round-off errors
12:00 Lunch break
14:00 Xizhong Zheng, On the hierarchy of Delta_02-numbers
14:30 K. Tadaki, An extension of Chaitin's halting probability Omega to measurement operator in infinite dimensional quantum system
15:00 Cagnard, Simonnet, Automata, Borel functions and real numbers in Pisot basis
15:30 Coffee break
16:00 Vincent Lefevre, The generic multiple-precision floating-point addition with exact rounding (as in the MPFR library)
16:30 Fousse, Schmitt, A comparison of polynomial evaluation schemes
17:00 Robert Rettinger, A fast algorithm for Julia sets of hyperbolic rational functions

Tuesday, November 16:

9:00  Benno Fuchssteiner (invited talk), New ideas and results for solving Differential equations symbolically
10:00 Graillat, Langlois, A comparison of real and complex pseudozero sets for polynomials with real coefficients
10:30 Coffee break
11:00 Open Session
12:00 Lunch break
14:00 Excursion

Wednesday, November 17:

9:00  Simon Plouffe, (invited talk), A survey of Integer Relations algorithms and rational numbers
10:00 Michel Hack, On intermediate precision required for correctly-rounding decimal-to-binary floating-point conversion
10:30 Coffee break
11:00 Peter Markstein, Software division and square root using Goldschmidt's algorithm
11:30 de Dinechin, Loirat, Muller, A proven correctly rounded logarithm in double-precision
12:00 Closing of the conference
12:15 Lunch