Floating Point Indoctrination Class Schedule

Most classes 8:00-10:00 AM at Sun Microsystems Bldg. 7, 2700 Coast Ave, Mountain View, CA. All lectures by Prof. William Kahan unless otherwise specified.

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## 1988
             Topics
01 May 03 -- Overview: mysteries, expectations, exceptions
02 May 05 -- Overview cont.
03 May 10 -- Integers, algebraic sign
04 May 12 -- Exceptions, benchmarks, rational arith, symbolic calcs
05 May 17 -- Floating point formats, precision, error
06 May 19 -- Overflow, underflow, roundoff, Horner's recurrence
07 May 24 -- Numerical Analysis in C, quot, sqrt, gradual underflow
08 May 26 -- IEEE 754/854
09 May 31 -- sgl(dbl) =? sgl, solving the quadratic
10 Jun 02 -- Multi-word arithmetic, nonstandard arithmetics, ACRITH
11 Jun 07 Ulirich Kulisch -- ACRITH
12 Jun 12 -- ACRITH critique, CORIC, 8087 stack
13 Jun 14 Jim Valerio -- Intel 80387 transcendentals, 80960, IEEE 754
14 Jun 16 -- Argument reduction for trig functions
15 Jun 21 Tom Anderson -- Cydrome Cydra-5
16 Jun 23 -- Symbolic math systems, precision, Gaussian elimination
17 Jun 28 -- Multiple-precision & other language issues
18 Jun 30 Cleve Moler -- 25 Years with Mathematical Software
19 Jul 05 -- Exception handling, more Gaussian elimination
20 Jul 07 -- Doubled precision, more Gaussian elimination
21 Jul 12 -- Exception handling, including Pyramid, Sun
22 Jul 14 -- Exception handling, including Weitek, IBM, VAX, Mips
23 Jul 19 with Clayton Lewis -- Exception handling on Cray, Apple, APL
24 Jul 21 -- Exceptions, singularities, signed 0
25 Jul 26 -- Retrospective diagnostics
26 Jul 28 -- NaNs, tests, models
27 Jul 28 PM -- Summation: Is Floating Point Arithmetic a Moral Issue?
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