#### Attendees

Rajan Bhakta Steve Canon Marius Cornea David Hough Mathew Koshy Ian McIntosh Jon Okada Joel Salomon Jim Thomas Fred Tydeman

## CFP Study Group Meeting Minutes, September 8<sup>th</sup> 2011

#### Action items from previous meeting

- 1. Fred to change getpayload() from "undefined" to "unspecified" for non-NaN input.
  - Not Done
- 2. Jim and Jon to investigate how we might specify functions like hypot that might lose a signaling NaN input.
  - $\circ$  Done
- 3. Steve to update proposal for rounding attributes/modes and flags. o Open
- 4. Jim to change "fetestexceptflags" to "fetestexceptflag" in functions proposal.
  - $\circ$  Done

### Study group logistics

Next meeting time: Thursday, October 13<sup>th</sup> 2011 same time.

## **Discussions of NaNs**

- Jim / Jon's proposal for handling special case of functions that don't propagate qNaN (*posted under Topics* → *NaNs* → <u>JIMSNAN.TXT</u>). Proposal also fixes C1x spec not to prohibit if an implementation wants to completely supportsNaNs.
- Ian suggested an inquiry macro which would determine only a qNaN and be undefined for a sNaN, for faster implementation say by a non signaling compare equal.
- It was suggested to move the canonicalize() and payload() to Annex F
  - A.I: Fred to look into SNAND naming issue
  - A.I: Fred/Ian to investigate whether sNaN behavior in other sections like Annex G should be undefined or implementation defined.
  - $\circ~$  A.I: Fred to incorporate the suggestions into the NaN proposal.

# Discussions of Rounding attributes/modes and flags

- Jim sent out an email clarifying issues raised in the last meeting
- Jim suggested that static rounding mode takes precedence over dynamic rounding mode in a given scope. Jon and Ian raised concerns about the complex interaction cases between static and dynamic rounding mode, especially with setjmp/longjmp.
- In addition to the functions listed by Jim, Steve called out roundToIntegralExact, quantize, conversion from/to integer, and conversion operations from/to decimal character sequences functions that may be need to be affected by static rounding. Steve raised an issue of calling these functions via a pointer.
  - A.I: Steve to incorporate suggestions into the proposal document.

### **Other Discussions**

- Next C meeting on Oct 24-28. Jim talked with Jon Benito who would give a slot for CFP status. Jim suggested to
  - Present the features of 754 missing from c1x/decimal TR
  - Present the main topics addressed so far in order to present an idea of the proposed specifications.
  - $\circ~$  A.I : Jim to draft the outline of the presentation to C committee for review