### WG14 N2414

# **C Floating Point Study Group Teleconference**

August 21, 2019 8 AM PDT / 11 PM EDT / 3 PM UTC

Phone: 1-844-531-0958 Access code: 920 471 989 Global call-in numbers: <u>https://ibm.webex.com/cmp3300/webcomponents/widget/globalcallin/globalcallin.do?siteurl=ibm&s</u> <u>erviceType=MC&ED=711376817&tollFree=1</u> Wiki: <u>http://wiki.edg.com/twiki/bin/login/CFP/WebHome</u>

# **Draft Agenda**

### Meeting logistics

Note taker, mail out notes - Rajan

Introduction of attendees

#### Approval of agenda

#### Notes from 2019-07-17 meeting

Posted on CFP wiki

#### **Carry-over action items**

Rajan: Forward the IEEE article to WG14 once David H sends it out to us.

# Action items from 2019-07-17 meeting

Jim: Draft a slide deck based on CFP1331.

Jim: Add wording to the CFP1331 proposal make it clear this is for particular evaluation methods, and submit the document to W14.

Jim: Add a statement as to why there is a second name for log1p as a footnote as a new proposal. Fred: Submit CFP 1340 to WG14.

Jim: Reword CFP 1337 as per action item discussion in the 2019/07/17 meeting.

Jim: Send CFP 1349 to the WG14 reflector as the CFP position.

Fred: Write a paper to make the range error for small nonzero x consistent for expm1, logp1, log10p1's other base functions.

Jim: Add in the normalized discussion from Fred (CFP 1341, CFP 1342) to the agenda for next meeting.

## **Study group logistics**

Next meeting dates: Wednesday, September 18?

**IEEE 754 revision** 

C++ liaison

#### **C2x integration**

Part 1 Part 2 Part 3 Part 4ab Part 5abcd

#### Action item details

Jim: Draft a slide deck based on CFP1331. http://wiki.edg.com/pub/CFP/WebHome/C2x proposal - TS 18661-5abc-20190709.pdf

Jim: Add wording to the CFP1331 proposal make it clear this is for particular evaluation methods, and submit the document to W14. http://wiki.edg.com/pub/CFP/WebHome/n2407.pdf

Jim: Add a statement as to why there is a second name for log1p as a footnote as a new proposal. <u>http://wiki.edg.com/pub/CFP/WebHome/C2x proposal - why logp1-20190719.pdf</u>

Fred: Submit CFP 1340 to WG14. http://www.open-std.org/jtc1/sc22/wg14/www/docs/n2406.htm

Jim: Reword CFP 1337 as per action item discussion in the 2019/07/17 meeting. See CFP 1371.

Jim: Send CFP 1349 to the WG14 reflector as the CFP position. See SC22WG14.16914 and SC22WG14.16919.

Fred: Write a paper to make the range error for small nonzero x consistent for expm1, logp1, log10p1's other base functions. See CFP 1357, 1360.

Jim: Add in the normalized discussion from Fred (CFP 1341, CFP 1342) to the agenda for next meeting.

What does "normalized" mean in C?

#### **Other issues**

Namespace intrusion.

Specifying more special cases for math functions, e.g., periodicity for half-revolution trig functions. Perhaps as recommended practice.

Example for FLT\_EVAL\_METHOD <u>http://wiki.edg.com/pub/CFP/WebHome/Example\_for\_FLT\_EVAL\_METHOD-20190815.pdf</u>

SNANF See CFP 1366, 1372

Others?

Activities Review activities in progress