

**WG14 N2503**

## **C Floating Point Study Group Teleconference**

March 18, 2020  
11:00 EDT, 8:00 PDT, 3PM UTC

Join from PC, Mac, Linux, iOS or Android: <https://iso.zoom.us/j/5486753685>

Or iPhone one-tap :

US: +16699006833,,5486753685# or +14086380968,,5486753685#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 669 900 6833 or +1 408 638 0968 or +1 646 876 9923 or 877 853 5247 (Toll Free)

Meeting ID: 548 675 3685

International numbers available: <https://iso.zoom.us/j/5486753685>

Or Skype for Business (Lync):

<https://iso.zoom.us/skype/5486753685>

Wiki: <http://wiki.edg.com/twiki/bin/login/CFP/WebHome>

### **Draft Agenda**

#### **Meeting logistics**

Note taker, mail out notes

#### **Introduction of attendees**

#### **Approval of agenda**

#### **Notes from 2020-02-19 meeting**

Posted on CFP wiki

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

CFP: Put the tgm<sub>math</sub> redefinition as a proposal to the standard once we have a base document with TS Part 3 in it.

Jim: Look at seeing what would be involved in removing TS-3 types that already have the same basic types.

#### **Action items from 2020-02-19 meeting**

Jim: Post new teleconference number to the CFP mailing list.

Jim: Remove 'IEEE 754 revision' from the agenda.

Jim+David: Look into Jim's duplicated CFP messages.

Fred: Rework CFP1437 based on CFP1488.

Jim: Create a WG14 proposal to add in CFP1460.

Jim: Replace N2475 with a newer example given in CFP1468.

Jim: Change the footnote for [http://wiki.edg.com/pub/CFP/WebHome/C2x\\_proposal - powr justification wording-20200203.pdf](http://wiki.edg.com/pub/CFP/WebHome/C2x_proposal_powr_justification_wording-20200203.pdf) as per CFP1465.

Rajan: Check with Joseph as to why <http://man7.org/linux/man->

[pages/man3/strfromd.3.html](http://pages/man3/strfromd.3.html) seems to say you can have strfromd given non-null terminated strings.

Rajan: Check to see if a cast on a constant expression is still a constant expression with WG14.

Jim: Write a note for `_Float16` getting infinity as a `_Float16` type in Part 3 as an annex.

Jim: Get document numbers for updates to C to IEEE-2019, add in a link to the background document, and submit to WG14.

## Study group logistics

Next meeting dates: Wednesday, April 15?

ISO Zoom working ok?

## C++ liaison

## C2x integration

Latest C2X draft: <http://www.open-std.org/jtc1/sc22/wg14/www/docs/n2454.pdf>

also as link on CFP wiki

Part 1

Part 2

Part 3

Part 4ab

Part 5abcd

IEEE 754-2019 support

## Action item details

CFP: Put the `tgmath` redefinition as a proposal to the standard once we have a base document with TS Part 3 in it.

Jim: Look at seeing what would be involved in removing TS-3 types that already have the same basic types.

See

[\[Cfp-interest 1521\] request for input](#) *Jim Thomas*

[\[Cfp-interest 1522\] Re: request for input](#) *Joseph Myers*

[\[Cfp-interest 1524\] Re: request for input](#) *Jim Thomas*

[\[Cfp-interest 1525\] Re: request for input](#) *Joseph Myers*

Fred: Rework CFP1437 based on CFP1488.

See

[\[Cfp-interest 1502\] Range errors](#) *Fred J. Tydeman*

[\[Cfp-interest 1532\] Re: Range errors](#) *Jim Thomas*

Jim: Create a WG14 proposal to add in CFP1460.

See [\[Cfp-interest 1516\] AI about proposal regarding math function properties](#) *Jim Thomas*

Jim: Replace N2475 with a newer example given in CFP1468.

See [\[Cfp-interest 1517\] AIs for submitting documents](#) *Jim Thomas*

Jim: Change the footnote for [http://wiki.edg.com/pub/CFP/WebHome/C2x\\_proposal\\_-\\_powr\\_justification\\_wording-20200203.pdf](http://wiki.edg.com/pub/CFP/WebHome/C2x_proposal_-_powr_justification_wording-20200203.pdf) per CFP1465.

See [\[Cfp-interest 1517\] AIs for submitting documents](#) *Jim Thomas*

Rajan: Check with Joseph as to why <http://man7.org/linux/man-pages/man3/strfromd.3.html> seems to say you can have strfromd given non-null terminated strings.

See [\[Cfp-interest 1507\] Fw: Re: Question about strfromd in glibc](#) *Rajan Bhakta*

Rajan: Check to see if a cast on a constant expression is still a constant expression with WG14.  
See [\[Cfp-interest 1486\] Re: Action item: Constant expressions \\_Float16](#) *Rajan Bhakta*

Jim: Write a note for `_Float16` getting infinity as a `_Float16` type in Part 3 as an annex.  
See [\[Cfp-interest 1526\] AI about INFINITY and NAN macros and \\_Float16](#) *Jim Thomas*

Jim: Get document numbers for updates to C to IEEE-2019, add in a link to the background document, and submit to WG14.

See [\[Cfp-interest 1517\] AIs for submitting documents](#) *Jim Thomas*

## Other issues

Proposal for short float, floating type extensions for C++ and C.

Others?