

## **WG14 N3640**

### **CFP meeting**

**Wednesday, July 9, 2025**

**8 AM PDT / 11 AM EDT / 3 PM UTC**

Join from PC, Mac, Linux, iOS or Android:

<https://iso.zoom.us/j/98179522545?pwd=LMu038VgapssQjt1kLVD91BocpoGpS.1>

Password: 636044

Or iPhone one-tap :

US: +19712471195,,98179522545# or +16692192599,,98179522545#

Or Telephone:

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

US: +1 971 247 1195 or +1 669 219 2599 or +1 669 900 6833 or +1 720 928 9299 or +1 206 337 9723  
or +1 213 338 8477 or +1 253 215 8782 or +1 346 248 7799 or +1 408 638 0968 or +1 602 753 0140  
or +1 646 876 9923 or +1 651 372 8299 or +1 786 635 1003 or +1 267 831 0333 or +1 301 715 8592  
or +1 312 626 6799 or +1 470 250 9358 or +1 470 381 2552 or +1 646 518 9805 or 888 788 0099 (Toll  
Free) or 877 853 5247 (Toll Free)

Meeting ID: 981 7952 2545

Password: 636044

International numbers available: <https://iso.zoom.us/j/adHtkqa9Jp>

## **Draft Agenda**

### **Meeting logistics**

Note taker, mail out notes

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

### **Introduction of attendees**

### **Approval of agenda**

### **Study group logistics**

Next CFP meeting date: August 13th?

### **Notes from 2025-05-14 meeting**

- [\[cfp-interest 3534\] JTC1/SC22/WG14/CFP 2025/06/11 Meeting minutes - rev. 1](#) *Jerome Coonen*

### **TS-4 and TS-5 revisions**

- <https://www.iso.org/standard/83622.html>
- <https://www.iso.org/standard/83623.html>

## C Documents

C2y drafts:

- [N3550](#) 2025/05/04 Meneide, Working Draft (Post Graz 2025)
- [N3467](#) 2025/02/09 Meneide, Working Draft (Pre-Graz)
- [N3435](#) 2025/01/03 Meneide, C2y Working Draft
- [N3301](#) 2024/07/28 Meneide, Working Draft C2y Post-June 2024
- [N3299](#) 2024/07/28 Meneide, Working Draft C2y Post C23-Publication
- [N3220](#) 2024/02/22 Meneide & Wiedijk, Working Draft, C2y

C23 drafts:

- <https://webstore.iec.ch/en/publication/102886>
- [N3219](#) 2024/02/22 Meneide & Wiedijk, ISO/IEC 9899:2023 DIS Draft
- C23 working draft n3149 - July 2, 2023 - For CFP review only. Do not distribute.

## WG 14 issues

### IEEE 754 liaison

### C++ liaison

Reproducible floating point

- [\[cfp-interest 3453\] Fwd: floating point](#) *Jim Thomas*
- [\[cfp-interest 3461\] reproducibility vs conformance in 754 floating point](#) *David Hough CFP*

## Carry over action items

Ly: Send email on expanded complex functions.

Rajan: Monitor the new WG14 issue tracker re. TS 18661-4, the domain and range error issue.

## Action items from previous meeting

Jim: Add WG14 issues to the agenda.

Jim: Add discussion of Ly's note about fixed point arithmetic to the agenda.

Damian: Send a note about the improved use of "precision" in 754.

Rajan: Raise TS issue at August meeting.

Jim: Follow up with JeanHeyd on the `[[reproducible]]` example.

Jim: Write up proposal re. constant evaluation semantics

- [\[cfp-interest 3537\] Draft proposal re. constant evaluation semantics](#) *Jim Thomas*

Jerome: Write a proposal re. return type vs. value with changes along the lines of N3537 for `complex.h`

- [\[cfp-interest 3541\] action item -- return type vs value](#) *Jerome Coonen*

Damian: Rework the creal and cimag proposal with updated wording from the discussion. Distribute to the group for email comments. With no objections, move forward with WG14 before the next CFP meeting.

- [\[cfp-interest 3531\] Re: Changes - 7.3.1 Introduction <complex.h> + creal/cimag](#) *Damian McGuckin*  
[N3598](#) 2025/06/29 Thomas, Proposal for C2Y - 7.3.9.2/7.3.9.6 - Make text consistent between creal & cimag

Rajan: Bring the N3390 update issue up at WG14 meeting.

Damian & Jim: Break the Annex F work into individual items for the committee.

Jim & Rajan: Investigate the change to decouple pragmas from headers.

- [\[cfp-interest 3539\] Pragmas and headers](#) *Jim Thomas*

## Discussion of issues

Fixed point arithmetic

- [\[cfp-interest 3526\] Proposal: Fixed point TS revisit](#) *LNT*

Follow up on the `[[reproducible]]` example

- [\[cfp-interest 3466\] Re: `\[\[reproducible\]\]` EXAMPLE 3 in 6.7.13.8](#) *Jim Thomas*

Range error wording for atan2 and atan2pi

- [\[cfp-interest 3500\] Re: Range error conditions for atan2 and atan2pi](#) *Jim Thomas*

Proposal re. constant evaluation semantics

- [\[cfp-interest 3537\] Draft proposal re. constant evaluation semantics](#) *Jim Thomas*

Proposal re. return type vs. value with changes along the lines of N3537 for complex.h

- [\[cfp-interest 3541\] action item -- return type vs value](#) *Jerome Coonen*

Decoupling pragmas from headers

- [\[cfp-interest 3539\] Pragmas and headers](#) *Jim Thomas*

Annex F - syntax for function special cases

- [\[cfp-interest 3515\] Re: Discussion of Consistency Changes to Annex F](#) *Damian McGuckin*

Annex F - integer 'n'

- [\[cfp-interest 3515\] Re: Discussion of Consistency Changes to Annex F](#) *Damian McGuckin*

Annex F – signaling NaNs in F.2.2

- [\[cfp-interest 3515\] Re: Discussion of Consistency Changes to Annex F](#) *Damian McGuckin*

More complex functions, e.g. ccbrrt, csinpi

Missing quotes in C standard

- [\[cfp-interest 3475\] Missing quotes in C standard - 6.4.5.3#13](#) *Damian McGuckin*

Preferred quantum exponent

- [\[cfp-interest 3506\] preferred quantum exponent](#) *Vincent Lefevre*
- [\[cfp-interest 3512\] Re: preferred quantum exponent](#) *Jim Thomas*

Reserved 'exp' used in prototypes

- [\[cfp-interest 3542\] use of reserved exp in frexp\\*, ldexp\\* and scalbn\\* prototypes](#) *Vincent Lefevre*

F10.1#14

- [\[cfp-interest 3495\] C2Y - F10.1#14](#) *Damian McGuckin*

F.10.9.1 - nextafter(x, y)

- [\[cfp-interest 3498\] C2Y - F.10.9.1 - nextafter\(x, y\)](#) *Damian McGuckin*

canonicalize() in AnnexF - F.10.9.7

- [\[cfp-interest 3491\] C2Y's canonicalise\(\) in AnnexF - F.10.9.7](#) *Damian McGuckin*
  - [\[cfp-interest 3492\] Re: C2Y's canonicalise\(\) in AnnexF - F.10.9.7](#) *Damian McGuckin*

hypot(x, y) - C2Y F.10.5.4

- [\[cfp-interest 3503\] hypot\(x, y\) - C2Y F.10.5.4](#) *Damian McGuckin*
  - [\[cfp-interest 3504\] Re: hypot\(x, y\) - C2Y F.10.5.4](#) *Damian McGuckin*
    - [\[cfp-interest 3507\] Re: hypot\(x, y\) - C2Y F.10.5.4](#) *Paul Zimmermann*
  - [\[cfp-interest 3505\] Re: hypot\(x, y\) - C2Y F.10.5.4](#) *Vincent Lefevre*
    - [\[cfp-interest 3510\] Re: hypot\(x, y\) - C2Y F.10.5.4](#) *Damian McGuckin*
    - [\[cfp-interest 3511\] Re: hypot\(x, y\) - C2Y F.10.5.4](#) *Damian McGuckin*

hypot(x, NAN) in Annex F

- [\[cfp-interest 3490\] hypot\(x, NAN\) in Annex F](#) *Damian McGuckin*
  - [\[cfp-interest 3496\] Re: hypot\(x, NAN\) in Annex F](#) *Vincent Lefevre*

Magnitude or Absolute Value or |x| or ....

- [\[cfp-interest 3483\] Magnitude or Absolute Value or |x| or ....](#) *Damian McGuckin*
  - [\[cfp-interest 3486\] Re: Magnitude or Absolute Value or |x| or ....](#) *Damian McGuckin*

Rounding Direction Mode or Rounding Direction or Rounding Mode

- [\[cfp-interest 3484\] Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Damian McGuckin*
  - [\[cfp-interest 3485\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Damian McGuckin*
    - [\[cfp-interest 3508\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Vincent Lefevre*
      - [\[cfp-interest 3509\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Damian McGuckin*
    - [\[cfp-interest 3516\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *David Hough CFP*
      - [\[cfp-interest 3517\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Damian McGuckin*
        - [\[cfp-interest 3519\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Jim Thomas*
        - [\[cfp-interest 3521\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Damian McGuckin*
        - [\[cfp-interest 3523\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Jerome Coonen*
        - [\[cfp-interest 3524\] Re: Rounding Direction Mode or Rounding Direction or Rounding Mode](#) *Damian McGuckin*

Preferred Style in Annex F - fromfp/fromfpx or nearbyint/rint

- [\[cfp-interest 3499\] C2Y - Preferred Style in Annex F - fromfp/fromfpx or nearbyint/rint](#) *Damian McGuckin*