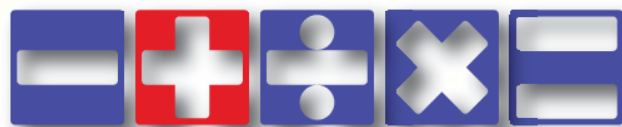# 33nd IEEE International Symposium on Computer Arithmetic

Fulda, Germany. June 28 - July 1, 2026.

Call for papers

ARITH 2026

Overview

The IEEE International Symposium on Computer Arithmetic (ARITH) has been the premier conference for *computer arithmetic* since 1969. ARITH 2026 welcomes submissions of papers describing recent scientific advances related to computer arithmetic. Accepted papers will be presented at the conference and included in the conference proceedings and in the IEEE Xplore Digital Library.

Details

Detailed submission procedure is available at `https://www.arith2026.org/`

Important dates (check the website for updates)

Abstracts: 23rd of January, 2026 | **Papers**: 30th of January, 2026 | **Notification**: 10th of April, 2026

Implementation of computer arithmetic

- Arithmetic theory of computer systems
- Number representation of integers, real and complex numbers, finite-fields, etc.
- Analysis of number systems such as fixed/floating point, intervals, posits, etc.
- Novel arithmetic systems and application-specic number formats
- Standardization (e.g., IEEE P3109, IEEE 754-2029)

Algorithms and numerics

- Computer approximations of elementary and special functions
- Arithmetic algorithms and their analysis (e.g., mixed precision, error analysis, etc.)
- Design, compilation, optimization, validation, and verification of numerical software

Algorithms and numerics

- Novel architecture of arithmetic units on various technologies including traditional, FPGA, optical, analog, quantum, etc.
- High-performance, low-power and fault-tolerant designs and implementations
- Design tools and methodologies, including testing and formal verification

Application-specific arithmetic

- Artificial intelligence, machine learning and deep learning
- Cryptography and security
- Signal processing, multimedia, and computer graphics

All topics that relate to intensive use of computer arithmetic are welcome as well. We hope to see you at the conference!