

Special Issue

Recent Advances in Neutrino Detectors

Message from the Guest Editor

We are embarking on an exciting new era of unprecedented precision in neutrino physics, enabled by innovative developments in detector instrumentation. A confluence of emerging technologies is expanding the frontiers of accessible energies and time scales, affording new and richer insights about interactions and allowing for detectors of immense target masses, all providing novel and more sensitive probes to address fundamental questions at the heart of particle physics and the nature of matter and the universe. This Special Issue aims to highlight recent developments in neutrino instrumentation, including assessments of technologies fielded in fully integrated detectors, advanced techniques being investigated for next-generation experiments, and creative ideas under development for future applications. This issue seeks to provide a compelling snapshot of the instrumentation technologies at the forefront of neutrino discovery today and in the coming years.

Guest Editor

Dr. Andrew T. Mastbaum

Department of Physics and Astronomy, Rutgers University, Piscataway, NJ 08854, USA

Deadline for manuscript submissions

30 June 2026



Instruments

an Open Access Journal
by MDPI

CiteScore 3.3
Tracked for Impact Factor



mdpi.com/si/254073

Instruments
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
instruments@mdpi.com

[mdpi.com/journal/
instruments](https://mdpi.com/journal/instruments)





Instruments

an Open Access Journal
by MDPI

CiteScore 3.3
Tracked for Impact Factor



[mdpi.com/journal/
instruments](https://mdpi.com/journal/instruments)



About the Journal

Message from the Editor-in-Chief

The realization of dedicated instrumentation has always been a collateral aspect of experimental research. In addition, many groups dedicate efforts and resources solely to the development of new devices, sensors, equipment and large infrastructure, theoretical and numerical studies, and novel experimental methodologies. With *Instruments* we wish to address both established and emerging communities, also to favor the creation of innovative trans-disciplinary approaches. We see *Instruments* as an exciting high-impact journal that will soon hold a leading position in disseminating cutting edge scientific and technological research.

Editor-in-Chief

Prof. Dr. Antonio Ereditato

Enrico Fermi Institute, The University of Chicago, Chicago, IL 60637,
USA

Author Benefits

High Visibility:

indexed within ESCI (Web of Science), Scopus, Inspec, CAPIus / SciFinder, INSPIRE, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.1 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.