Special Issue

Advances in Neutrino Detectors

Message from the Guest Editor

Since the discovery of neutrino oscillations in 1998, the study of neutrinos has become, alongside the high energy frontier at the *Large Hadron Collider* (LHC), and the search for particle dark matter, one of the three pillars of experimental particle physics. The low-hanging fruit of the three neutrino PMNS mixing matrix has, by now, all been harvested. To varying precisions, we know the values of the three mixing angles and two mass-squared difference scales, but subtler points remain unknown. These include many with profound implications, such as CP violation in neutrino mixing, the absolute neutrino mass scale, the nature of neutrino antimatter, and the number of neutrino flavors. Future progress in neutrino physics is dependent on continued innovation in detector technology, which is why we believe that now is a good time to take stock of our technologies: what is the current state-of-the-art, and where are we going? Do we have the technology we need to address these big questions, or is further innovation required?

Guest Editor

Prof. Jonathan Link

Center for Neutrino Physics, Department of Physics, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, USA

Deadline for manuscript submissions

closed (30 November 2018)

Instruments

an Open Access Journal by MDPI

CiteScore 3.3
Tracked for Impact Factor

mdpi.com/si/16251

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

mdpi.com/journal/instruments

Instruments

an Open Access Journal by MDPI

CiteScore 3.3
Tracked for Impact Factor

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, CAPlus / 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.

MDPI