



an Open Access Journal by MDPI

Advances in Neutrino Detectors

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)

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?

Prof. Jonathan Link *Guest Editor*



mdpi.com/si/16251







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Antonio Ereditato

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, Inspec, CAPlus / SciFinder, INSPIRE, and other databases.

Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 24.9 days after submission; acceptance to publication is undertaken in 7.2 days (median values for papers published in this journal in the first half of 2024).

Contact Us

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