Special Issue

Neutrinos from Artificial Sources

Message from the Guest Editors

In the visible Universe, neutrinos are the most abundant particles after photons; nevertheless, their interactions with matter are rare, only through weak forces, which makes the study of their properties very challenging. In recent years, outstanding results have been achieved with natural neutrino sources, leading to a Nobel Prize in 2015 for the discovery of the neutrino flavor oscillations. Nowadays, man-made neutrino sources offer a powerful tool for the precision era of neutrino physics, able to help in shedding light on some of the most important open questions in the physics community, such as why there is more matter than antimatter in the Universe. Assets derived from exploiting neutrinos produced in artificial sources are different. The main topics this Special Issue will cover are related to the physics reach of man-made neutrinos produced via both conventional and novel techniques, specifically:
Reactor antineutrinos;
Accelerator neutrino beams;
Neutrinos from decay at rest;
Neutrino from spallation sources;
Neutrino from muon storage rings;
Beta beam neutrinos.

Guest Editors

Dr. Antonio Branca

1. Department of Physics, University of Milano-Bicocca, Piazza della Scienza 3, I-20126 Milano, Italy
2. Istituto Nazionale di Fisica Nucleare - Sezione di Milano Bicocca, Piazza della Scienza 3, I-20126 Milano, Italy

Dr. Andrea Falcone

1. Department of Physics, University of Milano-Bicocca, Piazza della Scienza 3, I-20126 Milano, Italy
2. Istituto Nazionale di Fisica Nucleare - Sezione di Milano Bicocca, Piazza della Scienza 3, I-20126 Milano, Italy

Deadline for manuscript submissions

closed (30 August 2023)

Universe

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 5.2

mdpi.com/si/115205

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

mdpi.com/journal/universe

Universe

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 5.2

mdpi.com/journal/universe

About the Journal

Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

Editor-in-Chief

Prof. Dr. Lorenzo Iorio
Ministero dell' Istruzione e del Merito, Viale Unità di Italia 68, 70125 Bari, Italy

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE (Web of Science), Astrophysics Data System, INSPIRE, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Astronomy and Astrophysics) / CiteScore - Q2 (General Physics and Astronomy)

MDPI