

# Neutrinos in the era of multi-messenger astronomy

*Friday, 21 June 2024 16:20 (30 minutes)*

The recent discoveries of high-energy astrophysical neutrinos and gravitational waves have opened new windows of exploration to the Universe. Neutrinos can escape dense environments from where photons can not reach us and travel undeflected through the Universe. In combination with measurements of electromagnetic radiation, neutrinos can help to solve long-standing problems in astrophysics and probe physics that plays a role at extreme conditions that otherwise are hardly accessible to laboratory experiments. For example, MeV neutrinos play a crucial role to alert electromagnetic observatories about the detection of a Galactic supernova, while TeV-PeV neutrinos have the potential to reveal the origin of cosmic rays. This talk will review the status of multi-messenger searches, including neutrinos.

## Poster prize

**Given name**

**Surname**

**First affiliation**

**Second affiliation**

**Institutional email**

**Gender**

**Collaboration (if any)**

**Primary author:** FRANCKOWIAK, Anna (Ruhr-Universität Bochum)

**Presenter:** FRANCKOWIAK, Anna (Ruhr-Universität Bochum)

**Session Classification:** S17: Synergies