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# Properties of light relics from cosmological observations

*Tuesday 29 August 2023 11:40 (30 minutes)*

The intersection of the cosmic and neutrino frontiers is a rich field where much discovery space still remains. Cosmology is an independent window to the physics of light relics –active neutrinos and other light massive particles that may populate the cosmological plasma - and allows to probe their behaviour over cosmological times and scales, something unachievable via terrestrial laboratory searches. In this talk I will discuss how observations of the cosmic microwave background and the large-scale structure of the Universe can be used to constrain the properties of neutrinos and other light relics. I will focus on “new physics” scenarios (e.g. beyond-standard-model properties, axion-like particles....). I will further discuss detection prospects from forthcoming cosmological observations.

**Presenter:** GERBINO, Martina (University of Rome 'Sapienza')

**Session Classification:** Plenary Session - Chair Clem Pryke