

Neutron Stars as Laboratories for Studying Matter under Extreme Conditions

Martin Urbanec,
Slezská Univerzita Opava

Neutron star cores reach conditions unattainable in terrestrial laboratories where densities overcome the density of atomic nuclei. On the other hand, neutron star crust consists of atomic nuclei surrounded by superfluid neutrons. In the talk, I will review how multi-messenger observations across the electromagnetic spectrum and via gravitational waves help us study these forms of matter.