

## **Three-nucleon forces and neutron-rich matter**

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Three-body forces are at the forefront of theoretical developments based on chiral effective field theories of quantum chromodynamics. I will discuss our understanding of three-nucleon forces and their impact on neutron-rich nuclei and neutron-rich matter in astrophysics. This will range from three-nucleon forces and the properties of exotic nuclei, and how new measurements test and constrain these subtle components of nuclear forces, to their impact on the symmetry energy and the nuclear equation of state, and on neutron star structure and neutron star mergers and their gravitational wave signal. Three-nucleon forces therefore provide an exciting link between theoretical, experimental and observational nuclear astrophysics frontiers.