

Neutrino Properties Working Group

Everything about a neutrino is a neutrino property

→ we overlap with everyone!

Topical Group Leads

(alphabetical)

Carlo Giunti

Ben Jones

Lisa Kaufman

Diana Parno

Primarily within our group

- Direct neutrino mass measurements
 - *Tritium experiments*
 - *Electron capture experiments*
 - *Etc.*
- Majorana vs Dirac nature
 - *Double beta decay*
 - *Double electron capture*
 - *Majorana phases*
 - *Pseudo-Dirac neutrinos*
 - *Sterile neutrino and BSM physics effects*
 - *Matrix elements, g_{ν} etc*
- Electromagnetic properties
 - *Charge radius*
 - *Electric dipole moment*
 - *Magnetic moment*
 - *Spin and spin-flavor precession*
- Lifetime
- Number of active neutrinos
- Non-oscillation measures of CPT / LV
- Gravitational interactions

Areas of overlap with other groups

- Mixing angles and Δm^2
- Mass ordering
- CP violation
- PMNS unitarity / non-unitarity
- Non-standard interactions
 - *...in oscillations*
 - *...in CEvNS*
 - *..in cosmology*
- Lorentz and CPT violation in oscillations
- Coherence properties / quantum gravity connections
- Light sterile neutrinos
- Heavy sterile neutrinos
- Collider searches for Majorana fermions
- Neutrino - dark matter interactions
- Weak mixing angle
- Astrophysical probes

Please tell us what we missed!