

## Neutrino winds on the sky

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Neutrinos become nonrelativistic at late times and cluster anisotropically behind moving halos, forming neutrino wakes in the opposite direction to the halo motion and causing halos to slow down due to dynamical friction. We show that this effect can be best extracted from future large scale structure surveys via three point cross correlations involving galaxies and a tracer of the matter field, and discuss ongoing work on extracting this observable from simulations. The signatures of neutrino wakes on the large scale structure offer a promising avenue to constrain neutrino properties from cosmological observations in a way that is complementary to standard methods.

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