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Measuring the Neutrino mass with next generation cosmology experiments

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In this short talk, I will review the effect of massive neutrinos on cosmological observables, such as the CMB temperature anisotropies, the matter power spectrum, the growth function of structures and the weak lensing shear.
For the scales and redshifts probed by future probes, the constraints on neutrino mass will increase by even an order of magnitude, depending on the combination of probes that are considered.
I will also mention some degeneracies of the neutrino mass with modified gravity, such as f(R) theories and the possibility of couplings between neutrino masses and dark energy, that could potentially solve the current tensions in cosmology.

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