



Contribution ID: 491

Type: **Poster**

## Decoherence of cosmological massive neutrinos

*Sunday 6 December 2015 18:40 (3 minutes)*

The transition of cosmological massive neutrinos into the non-relativistic regime acts as a decoherence process which also changes the oscillation probability, reaching different values for the asymptotic flavour composition. Furthermore, this effect could also increase the entropy inside the neutrino ensemble, triggering the formation of bulk viscosity and introducing fluctuations in the gravitational potential, which in turn induces secondary anisotropies in the cosmic microwave background by the integrated Sachs-Wolfe effect.

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**Session Classification:** 09 - Cosmic neutrinos