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## Multi-fluid perturbations in $f(T)$ gravity

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The cosmological perturbations for a multi-component cosmic medium is investigated in the frame-work of the modified teleparallel gravity. The evolution equations of the perturbations for each component fluid are derived following the covariant and gaugeinvariant perturbations formalism. For the analysis of our results, we consider the power-law  $f(T)$  gravity toy model and study the growth of the matter density fluctuations deep in the radiation- and dust-dominated epochs. We will then highlight the effect of torsion in the formation of large-scale structure formation in the universe.

### Apply to be considered for a student ; award (Yes / No)?

No

### Level for award;(Hons, MSc, PhD, N/A)?

N/A

**Primary authors:** Prof. ABEBE, Amare (North-West University); SAHLU, Shambel (North-West University)

**Presenter:** SAHLU, Shambel (North-West University)

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