

# LSST supernovae Ia and the turnaround epoch

*Thursday, 14 March 2019 15:00 (20)*

Galaxies form from primordial density perturbations that stop expanding and pass through a turnaround epoch, at which curvature is strongly positive: about five times as strong as density, when both are expressed as domain-averaged  $\Omega$ s. Moreover, a tight relation is expected between curvature and the domain-averaged expansion rate prior to turnaround. The high number density of LSST supernovae of type Ia that are followed up by spectroscopic redshifts should offer many opportunities for testing these two predictions of general relativity.

**Primary author(s) :** Prof. ROUKEMA, Boudewijn (Toruń Centre for Astronomy, Nicolaus Copernicus University)

**Presenter(s) :** Prof. ROUKEMA, Boudewijn (Toruń Centre for Astronomy, Nicolaus Copernicus University)

**Session Classification :** Galaxies and cosmology

**Track Classification :** Galaxies and cosmology