

# SVT in Literature

## 0.1 Weinberg: Cosmology (2008)

Uses specific gauge choices, harmonic eigenfunction decomposition, RW metric directly (not conformal to flat)

## 0.2 Ellis, Maartens: Relativistic Cosmology (2012)

SVT formalism is closest to matching APM. Uses too many extra gauge invariant combinations.

For scalar solutions, see (10.76) and (10.8.1) for  $\nu = 1$ .

For vector and tensor equations, see (10.89)-(10.91)

## 0.3 Bardeen: Gauge Invariant Cosmological Perturbations (1980)

Uses harmonic decomposition.

For scalar equations, see (4.3), (4.4), and (4.9)

For vectors and tensor, see (4.12)-(4.14)

## 0.4 Kodama, Sasaki: Cosmological Perturbation Theory (1984)

Uses harmonic decomposition. Large and confusing number of gauge invariant quantities.

For scalar equations, see (4.2a-c)

For vectors see (4.10a) and (4.10b)

For tensors, see (4.15) and tensor, see (4.12)-(4.14)

## 0.5 Maggiore: Gravitational Waves (2018)

Formalism similar to Ellis, close to APM.

For scalars see (19.2)-(19.4) and "master" eq. (19.26). For analytic radiation solution, see (19.127) (with initial conditions)

For tensors, see (19.213). For analytic radiation solution with initial conditions, see (19.232)