



Contribution ID: 160

Type: Oral Presentation

## CMB Tensor Anisotropies in $f(R)$ Gravity

Thursday, 14 July 2011 08:00 (15 minutes)

The cosmic microwave background (CMB) carries information from the last scattering surface that puts constraints on the multitude of proposed cosmological models and the gravity theories they are based on. Amongst such theories are the  $f(R)$  theories of gravity which have become an interesting endeavour to correct for the degeneracies of the concordance model. We present a description of CMB anisotropies generated by tensor perturbations in  $f(R)$  theories of gravity. The power spectra of the observables  $TT$  and  $EE$  in the special case of  $f(R)=R^{n+1}$

are computed using a modified version of CAMB.

**Level (Hons, MSc, &nbsp; PhD, other)?**

MSc

**Consider for a student &nbsp; award (Yes / No)?**

Yes

**Would you like to &nbsp; submit a short paper &nbsp; for the Conference &nbsp; Proceedings (Yes / No)?**

No

**Primary author:** Mr BOURHROUS, Hassan (University of Cape Town)

**Co-authors:** Dr DE LA CRUZ-DOMBRIZ, Alvaro (University of Cape Town/Universidad Complutense de Madrid); Prof. DUNSBY, Peter (University of Cape Town)

**Presenter:** Mr BOURHROUS, Hassan (University of Cape Town)

**Session Classification:** APSS

**Track Classification:** Track D1 - Astrophysics