

Contribution ID: **350** Type: **Oral Presentation** 

# Fluctuations in the Extragalactic Background Light and its Effects on the Hard Gamma Ray Spectrum

Tuesday, 4 July 2017 14:20 (20 minutes)

The interaction of Extragalactic Background Light (EBL) photons and gamma-rays from distant quasars results in the attenuation of the high energy tail of the gamma-ray spectrum. The attenuation depends on the EBL photon density. Clustering of galaxies on a scale of up to 100 Mpc causes fluctuations in the EBL photon density. We present an analytical model of the EBL fluctuations and discuss its effects on the hard gamma-ray spectra.

### Apply to be<br/>br> considered for a student <br/>br> &nbsp; award (Yes / No)?

Yes

#### Level for award<br/> -&nbsp;(Hons, MSc, <br> -&nbsp; PhD, N/A)?

PhD

#### Main supervisor (name and email)<br/> -br>and his / her institution

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## Would you like to <br > submit a short paper <br > for the Conference <br > Proceedings (Yes / No)?

Yes

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Session Classification: Astrophysics

Track Classification: Track D1 - Astrophysics