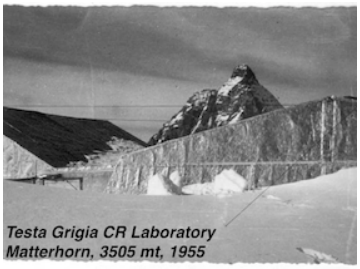

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Bayesian analysis of Cosmic Ray Propagation Parameters of Spatial Dependent Model: antiproton-to-proton ratio is consistent with Two-Halo-Model prediction.

Wednesday, 7 September 2016 17:30 (15 minutes)

We present the results of the scan of the parameter space for cosmic ray (CR) injection and propagation of Two-Halo-Model (THM). A Bayesian analysis is performed with Markov Chain Monte Carlo algorithm (MCMC). In THM, the propagation halo is divided into two different regions along the z-axis: inner and outer, where CRs will suffer from different propagation effects. We use proton and other light-nuclei data (He, C, Be-10/Be-9, B/C) to determine the relevant parameters and their uncertainties. I will also present the predicted antimatter spectra from secondary production with their uncertainties concerning propagation and production cross sections. Comparisons with conventional model predictions and with new antiproton data from AMS-02 will be presented and discussed.

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