Session I

Production of the light elements in the first minutes of the Universe



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Constraints from the cosmic microwave background experiments

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Abstract. I will give a review of the current constrains on light element abundances from cosmic microwave background experiments, focusing on results from WMAP and discussing prospects from upcoming data from Planck and ground-based experiments. I will describe how the production of light elements affects the CMB anisotropies, and how we use the data to extract cosmological information that includes constraints on the baryon density, and primordial abundances.

Keywords. Cosmology: cosmic microwave background

A couple of months after the Symposium, Joanna Dunkley informed the editors of these proceedings that "The WMAP collaboration's policy is not to write conference proceedings if they contain results published in WMAP papers. Since this review has been almost entirely focused on results from the 5-year WMAP analysis it cannot be reported here. The results can be found in Komatsu et al. (2009) and Dunkley et al. (2009)."

Given the relevance of her review to the discussions and the results of the whole Symposium we felt it would not be appropriate to simply skip her contribution. We thus report here the abstract that she originally sent and the references where the reader can find the WMAP results that she presented to the audience.

The responsibility of this decision is fully of the editors and should not be ascribed to Dr. Dunkley.

References

Dunkley, J., Komatsu, E., Nolta, M. R., Spergel, D. N., Larson, D. et al. 2009, ApJS, 180, 306 Komatsu, E., Dunkley, J., Nolta, M. R., Bennett, C. L., Gold, B. et al. 2009, ApJS, 180, 330