

# Alternative Cosmology Group Newsletter - July 2006

Posted July 20, 2006

*Correction to June Newsletter:*

*Due to error on the part of the editor, the third item was incorrectly described as confirming a constant surface brightness of galaxies. In fact, the paper used old data from Lubin and Sandage which implied a  $(z+1)^{-3}$  variation in surface brightness. The error is now corrected in the June newsletter.*

## **Two papers on the difficulty of reconciling galaxy number density and evolution models.**

Title: Rapid Evolution in the Most Luminous Galaxies During the First 900 Million Years

Authors: Rychard J. Bouwens (UCSC), Garth Illingworth (UCSC)

<http://www.arxiv.org/abs/astro-ph?papernum=.+0607087>

Measuring the Average Evolution of Luminous Galaxies at  $z < 3$ : The Rest-frame Optical Luminosity Density, Spectral Energy Distribution, and Stellar Mass Density

Authors: Gregory Rudnick, Ivo Labbe, Natascha M. Foerster Schreiber, Stijn Wuyts, Marijn Franx, Kristian Finlator, Mariska Kriek, Alan Moorwood, Hans-Walter Rix, Huub Roettgering, Ignacio Trujillo, Arjen van der Wel, Paul van der Werf, Pieter G. van Dokkum

<http://www.arxiv.org/abs/astro-ph?papernum=.+0606536>

## **A possible explanation of the lack of Sunyaev-Zel'dovich Effect**

Non-thermal cluster emissions: a simultaneous interpretation of the central soft X-ray excess and WMAP's non-detection of the Sunyaev-Zel'dovich Effect

Authors: Richard Lieu, John Quenby

<http://www.arxiv.org/abs/astro-ph?papernum=.+0607304>

## **New measurements of non-Gaussian ellipticity of CMB anisotropies**

Title: Ellipticity in Cosmic Microwave Background as a Tracer of Large-Scale Universe

Authors: V.G.Gurzadyan, C.L.Bianco, A.L.Kashin, H.Kuloghlian, G.Yegorian

<http://www.arxiv.org/abs/astro-ph?papernum=.+0607160>

## **Low values of deuterium abundance in local space**

Spitzer observations of hydrogen deuteride

Authors: David A. Neufeld (JHU), Joel D. Green (Rochester), David J. Hollenbach (NASA/Ames), Paule Sonnentrucker (JHU), Gary J. Melnick (CfA), Edwin A. Bergin (U. Michigan), Ronald L. Snell (U. Mass.), William J. Forrest (Rochester), Dan M. Watson (Rochester), Michael J. Kaufman (San Jose State U.)

<http://www.arxiv.org/abs/astro-ph?papernum=.+0606631>