Alternative Cosmology Group Newsletter - October 2006

Posted 11/29/06 (behind schedule due to transmission error.)

My thanks to Stephen J. Crothers, Tim Eastman and Francesco Sylos-Labini for sending me papers that I had overlooked and are included here. All ACG subscribers should feel free to send in suggestions. Please email the editor at elerner@igc.org.

There are quite a few articles that study the Hubble diagram for GRBs (gamma-ray bursters) and the questions of whether they or QSOs may be associated with low redshift galaxies. An earlier discussion of this topic is by Geoffrey Burbidge, Nucl. Physics B, 132, 305 (2004.)

First tentative detection of anisotropy in the QSO distribution around nearby edge-on spiral galaxies

Authors: M. Lopez-Corredoira, C. M. Gutierrez

http://lanl.arxiv.org/abs/astro-ph/0609514

On the Incidence of Strong MgII Absorbers Along GRB Sightlines

Authors: G.E. Prochter (1), J.X. Prochaska (1), H.-W. Chen (2), J. S. Bloom (3), M. Dessauges-Zavadsky (4), R. J. Foley (3), S. Lopez (5), M. Pettini (6), A. K. Dupree (7), P. Guhathakurta (1) ((1) UCO/Lick Observatory, (2) U Chicago, (3) UC Berkeley, (4) Observatoire de Geneve, (5) Universidad de Chile, (6) IoA, (7) Harvard)

http://lanl.arxiv.org/abs/astro-ph/0605075

Hubble diagrams of soft and hard radiation sources in the graviton background: to an apparent contradiction between supernova 1a and gamma-ray

burst observations

Authors: Michael A. Ivanov

http://lanl.arxiv.org/abs/astro-ph/0609518

Gamma Ray Bursts as standard candles to constrain the cosmological parameters

Authors: G. Ghirlanda (1), G. Ghisellini (1), C. Firmani

http://lanl.arxiv.org/abs/astro-ph/0610248

Two papers re-analyze well-known data sets with surprising results

On the Absence of Cosmic Acceleration

Authors: John Middleditch

http://lanl.arxiv.org/abs/astro-ph/0608386

The Cosmic Background Explorer's time-ordered data is also consistent with the absence of anisotropies in the cosmic microwave background

Authors: Keith S Cover

http://lanl.arxiv.org/abs/astro-ph/0607484

On the topic of CMB, an author argues that two more free parameters are needed to fit WMAP data

Running of Running of the Spectral Index and WMAP Three-year data

Authors: Qing-Guo Huang

http://lanl.arxiv.org/abs/astro-ph/0610389

Another study that confirms that Big Bang simulations are unable to from the large-scale structure that is observed

Formation of the Supercluster-Void Network

Authors: Jaan Einasto

http://lanl.arxiv.org/abs/astro-ph/0609686

On light element synthesis, new data makes the contradiction between observation and BBN predictions even sharper

First stars VII. Lithium in extremely metal poor dwarfs

Authors: P. Bonifacio (1,2,3), P. Molaro (2,3), T. Sivarani (4), R. Cayrel (2), M.Spite (2), F. Spite (2), B. Plez (5), J. Andersen (6,7), B. Barbuy (8), T.C. Beers (4), E. Depagne (9), V. Hill (2), P. Francois (2), B. Nordstrom (6), F. Primas

http://lanl.arxiv.org/abs/astro-ph/0610245

Helium abundances above 35% indicate that all of He abundance could have been produced by stars

NGC 6441: another indication for a very high helium content in Globular Cluster stars

Authors: V. Caloi, F. D'Antona

http://lanl.arxiv.org/abs/astro-ph/0610406

This paper is a good survey of the development of the black hole concept and the theoretical reasons why such objects can not exist.

A Brief History of Black Holes Stephen J. Crothers

Progress in Physics B, 132, 305

http://www.geocities.com/theometria/holes.pdf

An attempt to integrate plasma physics and GR, showing how plasma phenomena can generate high electric fields to accelerate particles. (Contrary to the statement at the end of this paper, work on such acceleration dates back to Alfven's in the 1930's)

Magnetohydrodynamics and Plasma Cosmology Authors: K. Kleidis, A. Kuiroukidis, D. B. Papadopoulos, L. Vlahos http://lanl.arxiv.org/abs/gr-qc/0512131