

Alternative Cosmology Group Newsletter - October 2005

Posted October 31, 2005

CCC-I considered the present understanding of the universe in light of the increasing challenges to the conventional cosmological model. Participants presented new and reviewed previous observations that are incompatible with the conventional model, and discussed its conceptual difficulties. The conference also discussed alternative models (including cosmologies without a big bang).

The CCC-I proceedings will be published by the American Institute of Physics in the AIP Conference Proceedings series. Expected ship timeframe is December 2005 - January 2006.

The first 100 copies are available at a discounted price of \$100 USD from the Alternative Cosmology Group. Buy this book at: <http://www.cosmology.info/2005conference/proceedings.htm>

Evidence for a Non-Expanding Universe: Surface Brightness Data From HUDF

Authors: Eric J. Lerner (Lawrenceville Plasma Physics)
<http://arxiv.org/abs/astro-ph/0509611>

Elliptical Galaxy Halo Masses from Internal Kinematics

Authors: Aaron J. Romanowsky
<http://arxiv.org/abs/astro-ph/0510183>

Detailed WMAP/X-ray comparison of 31 randomly selected nearby clusters of galaxies - incomplete Sunyaev-Zel'dovich silhouette

Authors: Richard Lieu, Jonathan P.D. Mittaz, Shuang-Nan Zhan
<http://www.arxiv.org/abs/astro-ph/0510160>

Age of High Redshift Objects - a Litmus Test for the Dark Energy Models

Authors: Deepak Jain, Abha Dev
<http://arxiv.org/abs/astro-ph/0509212>

Mapping extreme-scale alignments of quasar polarization vectors

Authors: D. Hutsemekers, R. Cabanac, H. Lamy, D. Sluse
<http://arxiv.org/abs/astro-ph/0507274>

Spectroscopic Studies of z~5.7 and z~6.5 Galaxies: Implications for Reionization

Authors: Esther M. Hu, Lennox L. Cowie, Peter Capak, Yuko Kakazu
<http://arxiv.org/abs/astro-ph/0509616>

On the large-angle anomalies of the microwave sky

Authors: C. J. Copi, D. Huterer, D. J. Schwarz, G. D. Starkman
<http://arxiv.org/abs/astro-ph/0508047>

Endless age crisis for the Big Bang!!!

Massive Black Hole in the Early Big Bang Universe!?

"A team of astronomers have found a colossal black hole so ancient, they're not sure how it had enough time to grow to its current size, about 10 billion times the mass of the Sun.

Sitting at the heart of a distant galaxy, the black hole appears to be about 12.7 billion years old, which means it formed just one billion years after the universe began and is one of the oldest supermassive black holes ever known.

The black hole, researchers said, is big enough to hold 1,000 of our own Solar Systems and weighs about as much as all the stars in the Milky Way.

"The universe was awfully young at the time this was formed," said astronomer Roger Romani, a Stanford University associate professor whose team found the object. "It's a bit of a challenge to understand how this black hole got enough mass to reach its size."

http://www.space.com/scienceastronomy/heavy_blazar_040628.html
<http://www.arxiv.org/abs/astro-ph/0406252>

Massive black holes widespread in the early Universe

"Two monstrous black holes are jostling for power in the same galaxy, the Chandra X-ray satellite has revealed. The pair will slam into each other in a few hundred million years, giving the fabric of space-time a good shake."

<http://www.newscientist.com/article.ns?id=dn5060>

How were lava sheets produced? Think about the mid ocean ridge!

"Vast sheets of prehistoric lava that oozed across the land millions of years ago were probably caused by meteorites slamming into the Earth's crust, scientists say."

<http://www.guardian.co.uk/science/story/0,3605,1602572,00.html>

Do galaxy assembly show similar pattern?

Magnetic Nanoparticles Assembled into Long Chains

<http://www.physlink.com/News/102605NanoChains.cfm>

Strange and spongy!

Cassini's Doubleheader Flybys Score Home Run

"Cassini performed back-to-back flybys of Saturn moons Tethys and Hyperion last weekend, coming closer than ever before to each of them. Tethys has a scarred, ancient surface, while Hyperion is a strange, spongy-looking body with dark-floored craters that speckle its surface."

<http://saturn.jpl.nasa.gov/news/press-release-details.cfm?newsID=605>

Even 'failed stars' form planets

"An international team of astronomers shows that even brown dwarfs start to form planets. Thus, the process of building planets is more universal and robust than had previously been assumed (Science Express, October 20, 2005)."

<http://www.spaceref.com/news/viewpr.html?pid=18121>

Smallest Planet Yet Found Circling a Main Sequence Star (other than our sun)

<http://www.spaceref.com/news/viewsr.html?pid=18420>

NASA'S Chandra X-Ray Observatory Reveals New Star Generation

NASA's Chandra X-ray Observatory revealed a new generation of stars spawned by a super-massive black hole at the center of the Milky Way galaxy. This novel mode of star formation may solve several mysteries about these super-massive black holes that reside at the centers of nearly all galaxies.

<http://www.spaceref.com/news/viewpr.html?pid=18036>

Speed of light broken with basic lab kit

"Electric signals can be transmitted at least four times faster than the speed of light using only basic equipment that would be found in virtually any college science department."

<http://www.newscientist.com/article.ns?id=dn2796>

A cold twist on the Hanbury Brown Twiss effect

<http://physicsweb.org/articles/news/9/9/10/1?rss=2.0>