# **Alternative Cosmology Group Newsletter - November 2005**

# Posted December 7, 2005

The CCC-I Proceedings volume, published by the American Institute of Physics, is essential reference source for everyone interested in cosmology and development of new theories. Copies of the volume are available at a discounted price of \$100 USD from the Alternative Cosmology Group. The book is available from http://www.cosmology.info/2005conference/proceedings.htm

#### Recent Supernovae Ia observations tend to rule out all the cosmologies!

R. G. Vishwakarma

#### http://www.arxiv.org/abs/astro-ph/0511628

## Multivariate Non–Normality in WMAP 1st Year Data

Patrick Dineen, Peter Coles

## http://www.arxiv.org/abs/astro-ph/0511802

The understanding of structure build-up is a key for progress in cosmology and modern physics.

## A Giant Hubble Mosaic of the Crab Nebula

#### http://hubblesite.org/newscenter/newsdesk/archive/releases/2005/37/ http://hubblesite.org/newscenter/newsdesk/archive/releases/category/nebula/supernova%20remnant/

#### First step toward making "little sun" as limitless energy source reported

#### http://www.world-science.net/othernews/051123\_fusionfrm.htm

#### The tiniest solar system

"The researchers used a combination of ground-based and orbiting telescopes to make the find. They said the "failed star," less than one-hundredth the weight of the Sun, is the smallest known star-like object to harbor what seems to be a surrounding disk of debris. This material could evolve into tiny planets."

## http://www.world-science.net/othernews/051130\_tinysolarfrm.htm

#### Sharp Vision Reveals Intimacy of Stars

# http://www.spaceref.com/news/viewpr.html?pid=18375

#### Expanding universe shrinks star-forming galaxies

"Ironically, the expansion of the universe may be responsible for the ever-shrinking size of star-forming galaxies, according to new calculations. The research suggests our own Milky Way galaxy may stop forming stars in just a few billion years time."

"For several years, astronomers have reported a peculiar trend through time in the size of galaxies that give birth to stars. For the first four billion years or so after the big bang, progressively larger galaxies forged new stars, with the largest galaxy weighing in with about 10 times as many stars as the Milky Way. But then the trend mysteriously reversed, and stellar nurseries have popped up only in much smaller galaxies over the last 10 billion years."

"The big galaxies are still there, but they aren't forming stars anymore, and the ones that are still forming stars are smaller and smaller," says Evan Scannapieco, an astrophysicist at the University of California in Santa Barbara, US. "The question is: why?"

#### http://www.newscientistspace.com/article/dn8292

#### Dwarfs found in colliding galaxies' wake

"A new method to detect small, faint galaxies that spring up in the wake of violent galactic collisions has been devised by astronomers using the Spitzer Space Telescope. The method could shed light on how most of the galaxies near our own formed."

## http://www.newscientistspace.com/article.ns?id=dn8354

## Crashing galaxies may have spit out monster black hole

"A collision between two galaxies may have led them to spit out a colossal black hole that's still soaring through space, some astronomers have calculated."

#### http://www.world-science.net/exclusives/051111\_holefrm.htm

# Using laser beams and electric fields, NASA researchers are probing the curious behavior of moondust.

## http://science.nasa.gov/headlines/y2005/21nov\_abbas.htm?list125689

## Young Stars Sculpt Gas with Powerful Outflows

# http://hubblesite.org/newscenter/newsdesk/archive/releases/2005/35/ http://hubblesite.org/newscenter/newsdesk/archive/releases/category/star%20cluster/

"Astronomers have used NASA's Hubble Space Telescope to peer into the center of a dense swarm of stars called Omega Centauri. Located some 17,000 light-years from Earth, Omega Centauri is a massive globular star cluster, containing several million stars swirling in locked orbits around a common center of gravity. The stars are packed so densely in the cluster's core that it is difficult for ground-based telescopes to make out individual stars. Hubble's high resolution is able to pick up where ground-based telescopes leave off, capturing distinct points of light from stars at the very center of the cluster."

## http://hubblesite.org/newscenter/newsdesk/archive/releases/2001/33/

## Hubble Discovers Black Holes in Unexpected Places

"Medium-size black holes actually do exist, according to the latest findings from NASA's Hubble Space Telescope, but scientists had to look in some unexpected places to find them. The previously undiscovered black holes provide an important link that sheds light on the way in which black holes grow. Even more odd, these new black holes were found in the cores of glittering, "beehive" swarms of stars called globular star clusters, which orbit our Milky Way and other galaxies. The black hole in globular cluster M15 [left] is 4,000 times more massive than our Sun. G1 [right], a much larger globular cluster, harbors a heftier black hole, about 20,000 times more massive than our Sun."

## http://hubblesite.org/newscenter/newsdesk/archive/releases/2002/18/

## Neutron star found where a black hole was expected

"A very massive star collapsed to form a neutron star and not a black hole as anticipated, according to new results from NASA's Chandra X-ray Observatory. This discovery shows that nature has a harder time making black holes than previously thought."

## http://spaceflightnow.com/news/n0511/02neutronstar/

## Light seen from possibly first objects in universe

"We think we are seeing the collective light from millions of the first objects to form in the universe," said Dr. Alexander Kashlinsky, Science Systems and Applications scientist and lead author on the Nature article that appears in the Nov. 3 issue. "The objects disappeared eons ago, yet their light is still traveling across the universe.""

# http://spaceflightnow.com/news/n0511/02firstobjects/

#### NASA Satellite Detects Massive Star Partner

http://www.spaceref.com/news/viewpr.html?pid=18156[/b]