

No big crunch: the universe will expand forever

By ANNA NEMCHUK
Editor-in-chief

"An ending in ice rather than fire," Alex Filippenko decreed would be the fate of the universe at the "Dark Energy and the Runaway Universe" Brown Bag last Friday.

March 9 saw Room 3201 packed to the rafters with students and instructors alike waiting for the UC Berkeley astronomy professor to begin the semester's second Brown Bag seminar.

Filippenko introduced cosmology, the study of the universe, by carefully pointing out its difference from cosmetology, the study of cosmetics and their use.

"There's a thousand stars in a patch of sky the size of a grain of sand," he continued. It is the aim of cosmologists to answer such questions as "When did time and the universe begin?" "How will

it all end?" and "How do galaxies form?" by studying some of those stars, usually through high-powered telescopes.

Edwin Hubble, a leader in cosmology, was the first to postulate that the universe is expanding due to his work with prisms, which refract light into its component colors - a rainbow. In 1929 he formulated Hubble's Law, which states that the distance of galaxies from ours is directly proportional to the amount of red in the spectrum of the light they give off, a phenomena analogous to the Doppler effect.

Since not all stars are actually close enough to provide sufficient light to measure, stars that have died explosively, referred to as supernovae, and are giving off huge amounts of energy are most often used for this.

From these principles, astronomers have seen that all galaxies

are moving away from each other except for those gravitationally bound to one another.

Assuming that some sort of Big Bang occurred to jump-start the universe in the first place, some scientists have previously thought that the rate of the universe's expansion would eventually slow and, counteracted by the gravitational forces all objects exert, reverse, bringing all galaxies back together and at some point resulting in a "Gnab Gib," the opposite of the Big Bang.

However, in 1998 Adam Reiss, with whom Filippenko worked with, discovered that some supernovae's light was fainter than should have been possible as predicted by existing theories.

That's when Einstein's "cosmological constant" came into play. He supposed that the constant, called the lambda effect, was a sort of anti-gravity force present in the

vacuum of space exactly equaling gravitational forces to keep the universe static.

When Hubble discovered the universe's expanding nature, Einstein denounced the theory as his "biggest blunder." However, "Einstein's biggest blunder may really have been his biggest triumph," according to Filippenko, as Riess and other cosmologists presented the presence of "dark energy," a force that pushed rather than (like gravity) pulled.

This dark energy is supposed to be uniformly spread throughout the universe but commanding such a small influence on matter that it needs gargantuan distances to really take effect. This would explain the phenomena that astronomers had noted - that at the outer boundaries of the universe, galaxies seem to be speeding away from each other at an increasing speed.

So it would seem that Robert Frost was right and "for destruction ice/Is also great/And would suffice," ended Filippenko to applause, laughter and genuinely thoughtful looks from the audience.

Filippenko has been voted "Best Professor" in Berkeley five times and was selected as the 2006 "Professor of the Year" by the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education (CASE).

The Brown Bag Seminars are presentations meant to inform and interest in the areas of math, science and technology. The next event, "Prehistoric Life and Global Climate Change" will be delivered by Paul Belasky, geology and geography assistant professor Friday, March 16 at 11:45 a.m. in Room 3201 with free refreshments available.

Update to campus security alert system in the works

By MICHAEL ABURAS
Staff writer

The Safety Committee here at Ohlone College has begun discussing installing a new campus-wide alert system in order to increase campus safety.

The new protocols and services are meant to replace the current system which can alert people to evacuate but cannot warn staff of specific threats.

"If we need to keep someone in a certain area, there's no way for us to do that," said Campus Police Chief Steven Osawa. "If we had someone with a gun shooting people or a toxic spill, how do we tell everyone to stay inside? We would have to send someone room to room."

In addition, the improved alert

system would provide a more organized way to evacuate the campus. Osawa explained that a few years ago the school received a credible bomb threat and the campus had to be evacuated. "It took two hours to evacuate the campus. Everyone ran to their cars," he said.

But the more serious problem remains in the possibility of needing people to either stay inside or in a certain area. Osawa noted, "We're not the only campus. Many large businesses don't have that capacity either."

The campus is currently in the process of installing telephones in all classrooms. "The issue," according to Osawa, "is how would we call all those phones at once. We would like it to be like a hotel system where they can send mes-

sages to all the rooms."

Financing the alert system is also something that has to be addressed. "If we can afford it, it would cost thousands and thousands of dollars. We have to come up with a viable means to do it and address the budgetary aspects as well."

Osawa also explained that, "because of the dynamics of our student population, we would have to develop a system that addresses the hearing impaired as well."

An incident that illustrated the necessity of a more complete alarm system occurred last Friday, March 9; the entirety of Building 8 was evacuated around 8:20 a.m. for a fire alarm being triggered by machinery releasing steam. With a more advanced system, the accident may not have proven as disruptive.

Student services gets a home

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campus. An additional drive is planned to raise \$10 million to furnish the new building and refurbish the old buildings. The Measure A bond was approved by voters on March 5, 2002.

The buildings that formerly held various student services will be readjusted for classroom and office space. Buildings 25 and 26 will be torn down to make room for parking that will help compensate for the lost parking space of lots O and P. The services that will be moving to the new building are the counseling department, student health center, financial aid office, cashier's windows, transfer center, student success center, extended opportunity programs and services, the

office of admissions and records, the information center, the international admissions office, the Associated Students of Ohlone College office, the testing center and veterans' services. The Ohlone cafeteria will not be moved, but there will be portable food stands around the new building. The bookstore and library will also remain in their current locations.

The new building is also intended to better integrate Ohlone's staff members and improve communication between them. By putting all related services into one building, staff members in charge of these services can more efficiently work together to serve students. This will also help reduce all the red tape and detours students need to deal

with to take care of simple tasks. The Student Services building will also serve as a gathering place for students and will contain meeting places for clubs and groups as well as private study rooms.

Changes to campus parking lots will take place on May 1, just as lots O and P close for construction. Lot N, just below lot O, will be converted to a parking lot for disabled students and carpoolers. Lot B, which is currently a staff parking lot, and lot W, which is next to the Smith Center, will be open to students and staff on a first-come-first-serve basis. There will also be a shuttle running along the road to which lots C, D, E, H, and K connect, stopping at the Palm Grove near lot A.

A modest drug proposal - live and let live

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completely out of proportion and, as usual, the main point has gotten lost in the rabble.

Human society has as its purpose one thing and one thing only - to improve the quality and likeliness of human life. Everything else can be boiled down to that.

The moment society stops helping the individual and begins to harm, it has invalidated its own existence and that's accomplished first and foremost by the encroaching by the government on individual civil liberties.

Personal choices are just that - personal - under the control of each person and only that person.

Drug use is a personal choice.

It is not the government's responsibility to police people's personal lives, much as the process seems to bring it great enjoyment.

The impact of drug use on society, however, is a social issue that can and should be addressed, starting with the reason so many people seek escape from their lives in the first place.

For more information on the good fight, go to www.rsdrug-scommission.org and www.mpp.org.

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