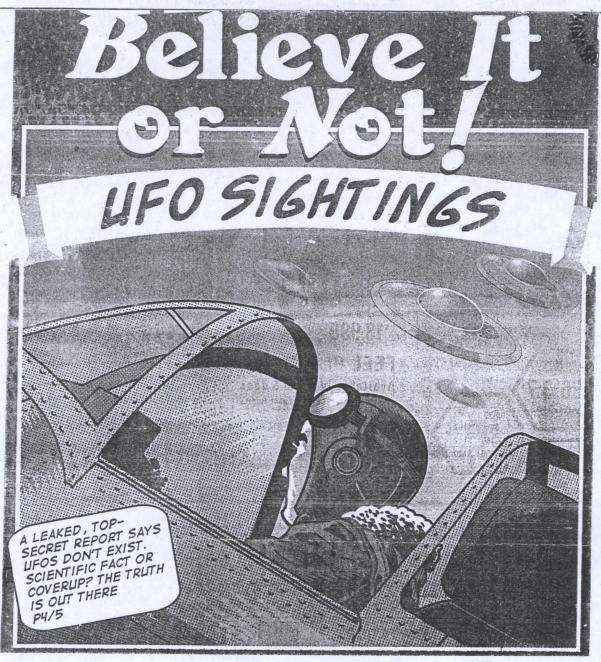
# DELVE REPORT 2006

SAUCERS, SPACE & SCIENCE

News you may have missed



NATIONAL POST, MONDAY, MAY 8, 2006

**Hopes** — **or fears** — that the Earth has been visited by aliens have been dismissed in an official report by British defence specialists. The Ministry of Defence confirmed in London yesterday that a secret study completed in 2000 found no evidence that "flying saucers" or unidentified flying objects were anything other than natural phenomena. The 400-page report, released under free-

dom of information laws, concluded that meteors and unusual atmospheric conditions could explain UFO sightings such as bright lights in the sky. "No evidence exists to suggest that the phenomena seen are hostile or under any type of control, other than that of natural physical forces," the report said, according to extracts quoted by the BBC. Reuters

#### News

UFO? TRY IFO. SCIENTISTS IN THE U.K. HAVE RELEASED A REPORT THAT CLAIMS TO PROVIDE AN EXPLANATION FOR FLYING SAUCERS, SUGGESTING ALL THOSE MYSTERIOUS GLOWING ORBS IN THE SKY ARE NOTHING TO SPEND TIME WORRY!NG ABOUT (unless you're with the British government, in which case four years of subsidized research is deemed appropriate). Of course, there's NO EVIDENCE to prove that the scientists haven't been BRAINWASHED BY ALIENS trying to LULL US INTO COMPLACENCY before WREAKING HAVOC ON EARTH. Either way, our culture loves to fantasize about the world behind the stars, and the mystery of UFOs isn't likely to vanish anytime soon. Dose probes the issue.

# UFOs just lots of gas,

π's A BIRD! It's a plane! It's ... an "electrically-charged gaseous mass."

researchers say

That's what researchers at the U.K.'s Ministry of Defence said could account for most sightings of unidentified flying objects.

In a document based on four years of research, the scientists described how glowing "plasmas" of gas could be created by charges of electricity in a rare and little-known atmospheric phenomenon. Flowing air could then sculpt the plasmas into aerodynamic shapes, which appear to fly at extraordinary speeds through the sky.

"Credited with the ability to hover, land, take off, accelerate to exceptional velocities and vanish, they can reportedly alter their direction of flight suddenly and clearly can exhibit aerodynamic characteristics well beyond those of any known aircraft or missile," the report said.

The 400-page report will be published on the ministry's website (<a href="www.mod.uk">www.mod.uk</a>) on May 15.

The researchers emphasized that what many have believed to be space-ships were not, in fact, vehicles housing bug-eyed men with anal probes. They said the plasmas could emit electromagnetic fields that, as a result, made witnesses suffer from "extended memory retention and repeat experiences" induced by the plasmas.

The findings contradict statements made last month by Briton Gary McKimnon, who is facing extradition to the U.S. for breaking into army computers. He said he saw a room in the Johnson Space Centre where UFOs were airbrushed out of satellite images, Reutersteports. —DOSE, DAILY TELEGRAPH

#### CANADA A UFO HOT SPOT

that UFO sightings are limited to lonely Americans wandering home in the middle of nowhere after a jug or two of moonshine, spotting flying objects is not a distinctly Yankee pastime.

Since 1989, there have been more than 6,000 Canadian UFO sightings recorded. According to the Canadian UFO Survey, conducted by UFOlogy Research of Manitoba, there were 769 sightings last year — nearly two a day.

The sightings are scattered across the country and are made by a variety of people, from military officers to air-traffic controllers. Victor Viggiani, a former school principal and director of Exopolitics Toronto, an organization that studies UFO phenomena, will present some of the witnesses' testimony tomorrow at an organized event in Toronto.

He has heard from 400 UFO witnesses and has become personally acquainted with at least 70, he said yesterday.

"I believe their testimony because each and every single one of them has come before a press conference and said they will testify under oath before Congress," Viggiani said. "People, especially those in the military, just don't say that. The way they give testimony is so credible and it converges with other lines of evidence."

Sightings are spread out across the country, but the East Coast, Lake Ontario and northern B.C. are UFO hotbeds, he said. The flying objects come in all shapes and sizes from cigar- or tubular-shaped UFOs to the classic flying saucer.

- CHRISTIE TUCKER/DOSE

#### **UFO SIGHTINGS DOWN**

**CANADIANS DISTRESSED** over the government's apathy toward UFO sightings will be interested to note that Canada is one of a few countries where independent researchers keep track of unknown objects spotted in the sky.

"We get cases from literally everywhere. We also get reports from the Department of National Defence and Transport Canada," said Chris Rutkowski, research coordinator for UFOlogy Research of Manitoba. "People are reporting in greater and greater numbers."

Rutkowski is an independent researcher who is not affiliated with any university or museum and compiles an annual survey of Canadian UFO sightings and acts as a liaison between the scientific community and the public.

The number of UFO sightings has risen steadily each year, to 882 in 2004 from 259 in 1999. Last year, the number dipped to 769, an anomaly in an otherwise uninterrupted annual rise in sightings since the 1980s, he said.

About 10 per cent of the population believes they have seen a UFO, said Rutkowski, who attributes the steady rise in UFO reports to people's increasing willingness to discuss their experiences. The vast majority of reports come from private individuals. A few (four per cent) come from the government and most turn out to be explainable.

It's too early to tell if the upward trend will continue this year, said Rutkowski, who won't have an idea of this year's numbers until the end of summer. — KP

TORONTO SUN TUESDAY, JULY 4, 2006

#### Asteroid a stone's throw away

LOS ANGELES (AP) — A huge asteroid whizzed by Earth yesterday, passing about 433,000 km from the planet's surface — slightly farther away than the moon.

More than three dozen asteroids have flown closer to Earth in the last few years, but scientists believe 2004 XP14 is among the largest.

Judging by its brightness,

2004 XP14 was estimated to be between 400 metres and 800 metres wide.

An asteroid that size, if it smashed into Earth, would probably cause regional destruction

Scientists have said it would take a 1.6-km-wide or larger asteroid to cause widespread devastation that could threaten civilization.

#### **CLASSIC QUOTE**

"You know, they call it prayer when you talk to God, but when God talks to you they call it schizophrenia."

Fox Mulder (David Duchovny), The X-Files

of UFO sightings in the 1960s, but reported sightings since then

The Department of National Defence received many reports

A spokesperson for the department said he

has no knowledge of any sightings

have decreased.

- NICOLE O'REILLY/DOSE

#### Top physicist sees gloomy future

Hawking said yesterday.

"We won't find anywhere as other star system," he said.

cates with the help of a computer because he suffers from the neurological disorder called ALS said that if humans can avoid killing themselves in the next 100 years, they should have space settlements that can continue without support from Earth.

'It is important for the human race to spread out into space for the survival of the species. Life on Earth is at the ever-increasing risk of being wiped out by a disaster, such as sudden global warming, nuclear war, a genetically engineered virus or other dangers we have not yet thought of," said the author of A Brief History of Time, who has done groundbreaking research on black holes and the universe's origins.

Not everyone, however, agreed

with Hawking's space theory. "I would still think that an underground base, for example in Antarctica, would be easier to build than building on the moon," said Alan Guth, an MIT physics professor.

HONG KONG (AP) — The survival of the human race depends on its ability to find new homes elsewherein the universe because there's an increasing risk that a disaster will destroy Earth, worldrenowned physicist Stephen

Humans could have a permanent base on the moon in 20 years and a colony on Mars in the next 40 years, the 64-year-old British scientist told a news conference.

nice as Earth unless we go to an-

Hawking — who communi-

metro

WEEKEND, JUNE 9-11, 2006

# Secretive socie

A serene suburban Ottawa setting has been transformed into a four-day festival of black suits, black limousines, burly security guards — and suspicions of world domina-

tion — as part of an annual world's most secretive and powerful societies.

No, not the Freemasons.

They're called the Bilderberg

group — a half-century-old comprising organization about 130 of the world's wealthiest and most powerful people. The group is named

after the Dutch hotel where it held its first meeting in 1954.

Members include European royalty, national leaders, political power-brokers, and heads of the world's

> biggest companies. Those who follow the Bilderberg group say it got Europe adopt a common currency, got Bill Clinton elected after he agreed to support NAFTA, and is spending

this week deciding what to do about high oil prices and that pesky fundamentalist president of Iran, Mahmoud Ahmadinejad. CANADIAN PRESS

#### privileged membership

meeting for The 2006 group includes one of the David Rockefeller, Henry Kissinger, Queen Beatrix of Holland, New York Gov. George Pataki, the heads of Coca-Cola, Credit Suisse, the Royal Bank of Canada, a number of media moguls, and cabinet ministers from Spain and Greece.

WEEKEND. JUNE 16-18, 2006

#### Pope said not to study universe: Hawking

World-renowned astrophysicist Stephen Hawking said yesterday Pope John Paul II once told scientists at a cosmology conference they should not study the origin of the universe because it was the work of God.

Hawking, author of bestseller A Brief History of Time, said the conference was at the Vatican. ASSOCIATED PRESS

# How much does the Canadian government know about UFOs?

THE SKY ARE NOTHING TO SPEN

CLAIMS TO PROVIDE AN EXPLANATI

subsidized research

to prove that the scientists haven't been BRAINWASHED BY ALIEI

our years of

ess you're with the British government, in which case J

course, there's NO EVIDENCE to COMPLACENCY before WREAKI

GGESTING ALL THOSE MYSTERIOUS GLOWING ORBS IN

時間とは

CERS

REPORT

Either way, our culture loves

h anytime soon. Dose

not elected government officials, are the ones involved in the

so-called coverup.

UFOs moved around. Smith's research was cut short when the

program folded

Victor Viggiani, director of Exopolitics Toronto, said he

believes the government has covered up its knowledge of UFOs. "The U.S. government has back-engineered UFO technol-

ogy," he said, meaning it has recreated technology found on

RCMP records of sightings since 1959 can be found at

Library and Archives Canada. According to the government of Canada website, researchers from the national research

council found that most sightings were "the result of natural

phenomena such as fireballs, weather balloons and meteors.

Other occurrences defy explanation."

гие нізтову оғ the Canadian government's tracking of UFO was found in a field in New Mexico, prompting years of controsightings dates back as far as 1947, the year of the infamous Roswell incident, in which debris from an apparent UFO crash versy and conspiracy theories.

The government of Canada outlines a complete timeline of government policy and research on UFOs in Canada on

magnetic field to move vehicles, which he

Viggiani claims that the U.S. and Canadian governments used by UFOs could be used on earth to provide free and clean swell crash. Canada is not as involved with back-engineering knowledge of the electromagnetic or propulsion technology energy. He said he believes that secret agents and agencies, but is involved in the coverup." believed was how

ing to unlock the secrets of geomagnetism, which uses earth's The engineer in charge of the project, Wilbert Smith, was try-Project Magnet was established in 1950, to study sightings, but it was abandoned in 1954 because of a lack of funding.

UFO crash sites. "Fibre-optic cable was the result of the Ro-

its website.

#### UFO SIGHTINGS THROUGH CANADIAN HISTORY

1788 British naval officer John Meares travelled to the West Coast and reported a story told by Aboriginals about a man who had arrived in a flying copper canoe.

1911 The Windsor Record reported on March 7 that an "air car" surrounded in lights was spotted over several villages around Chatham, Ont.

1933 With strange lights reported in the area of Nipawin, Sask., three people told authorities they discovered an oval ship glowing and being repaired by short beings in silver suits.

1962 Farmers south of London, Ont., reported seeing bright lights over their fields. The next day, portions of their land had been flattened, as if by heavy objects, and they found a strange glowing green gunk on the ground.

2005 A young couple in downtown Montreal claimed they saw a bright flickering light and moving quickly around the sky. It, apparently, emitted a beam of coloured lights from the bottom.

DOSE 279 MONDAY 8 MAY 2000

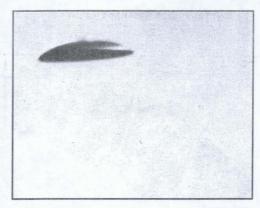
TORONTO SUN THURSDAY, JUNE 1, 2006



TOM HANSON/CP

#### **Astro-nomical coin**

Canadian astronaut Col. Chris Hadfield holds up a newly minted collectors coin at the Royal Canadian Mint yesterday. The coin bears his likeness and commemorates the fifth anniversary of his space walk, the first by a Canadian.



SUN FILE PHOTO

U.K. study would have us believe this is a meteor and not an alien space vehicle.

# UFOs deemed a myth

#### Earthlings reveal study

LONDON (Reuters) — Hopes — or fears — that the Earth has been visited by alien life forms have been dismissed in an official report by British defence specialists.\_\_\_\_

The defence ministry confirmed yesterday that a secret study completed in December 2000 had found no evidence that "flying saucers" or unidentified flying objects were anything other than natural phenomena.

The 400-page report, released under freedom of information laws to an academic from Sheffield, concluded that meteors and unusual atmospheric conditions could explain UFO sightings such as bright lights in the sky.

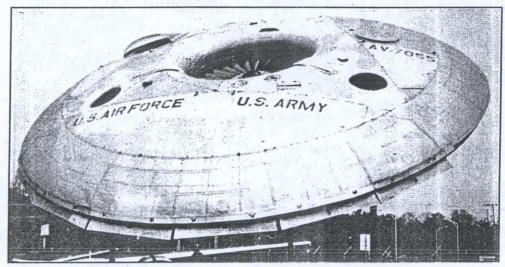
"No evidence exists to suggest that the phenomena seen are hostile or under any type of control, other than that of natural physical forces," the report said, according to extracts quoted by the BBC.

"Evidence suggests that meteors and their well-known effects, and possibly some other less-known effects, are responsible for some unidentified aerial phenomena."

A defence ministry spokesman said the full report — Unidentified Aerial Phenomena in the U.K. Air Defence Region — would be published on its website on May 15.

#### THE WAY WE WERE

Mike Filey



SUN FILE PHOTO

The Avrocar, above, was created by John Frost, Canadian scientist and inventor, in the '60s.

It was on this day in 1961 that the *Toronto Telegram* newspaper featured a story on John Frost, a Canadian scientist and inventor who was working as chief designer at the Avro Aircraft Co. in the city's suburb of Malton.

According to the article, Frost's latest creation, which the inventor had dubbed the Avrocar, "has perhaps given his adopted country (he was born near London, England,

and emigrated to Canada in 1947) what may prove to be the key patent in the whole business of building 'flying saucers.'"

Frost's invention was described as an 5.5-metre-wide inverted saucer-shaped vehicle designed to fly up to 480 km/h at altitudes ranging from 3 to 3,000 metres.

The principle that Frost was surewould make the Avrocar work was something he

called "ground cushion," a phenomenon created by turbulent, rapidly moving air that can lift a vehicle off the ground and by deflecting this jet of air make it dart sideways, backwards or forwards.

Frost discovered the idea while attempting to give the recently cancelled Avro Arrow the ability to take off and land vertically. Frost's Avrocar project was cancelled shortly after this article appeared.

TORONTO SUN FRIDAY, JUNE 16, 2006

# Spielberg heads into space

Steven Spielberg is going out of this world for his latest film project.

He will direct an untitled sci-fi movie to centre on a group of space explorers who travel through a wormhole and into another dimension, *Variety* reports.

Spielberg became interested in the real science theory that wormholes can be used as time travel portals when he attended a workshop on the controversial theory.

Since the project will take several years to develop, Spielberg will keep himself busy by directing the fourth instalment of *Indiana Jones*.

imself use externals

- CANOE.ca

metro WEEKEND, MAY 26-28, 2006

## Invisibility may be possible: researcher

**SCIENCE** New materials that can change the way light and other forms of radiation bend around an object may provide a way to make objects invisible, researchers said yesterday in the journal Science.

Researchers have come up with theories on ways to use experimental "metamaterials" to cloak an object and hide it from light and perhaps sonar.

metro THURSDAY, MAY 4, 2006

### Saturn spins slower than once thought

**SPACE** Saturn, a giant gas planet encircled with yellow and gold bands, is spinning slower than expected, scientists said yesterday.

Instead of a day on Saturn lasting roughly 11 hours, an international team of researchers has calculated the rotation period is 10 hours and 47 minutes — eight minutes slower than estimates from NASA's Voyager results from the early 1980s.

It may sound minor but scientists said it could affect the size of the planet's rock and ice core.

#### EVOLUTION

# Ancient 'molecular skeletons' discovered

#### **NORTHERN ONTARIO**

BY RANDY BOSWELL

A 2.45-billion-year-old rock chipped from a sandstone outcropping in Northern Ontario has produced the world's oldest indisputable evidence of an organism more complex than bacteria — the earliest known example of a life form that evolved to include everything from plankton to human beings, a team of researchers says.

The discovery of the "molecular skeletons" of the first eukaryotes — a pivotal link in the evolution of life on Earth — came after the team of U.S. and Australian researchers tested samples collected at Elliot Lake, a Canadian Shield mining town known among geologists for its impressive stretches of exposed ancient rock.

The researchers used a novel technique designed to detect — and then meticulously identify — faint traces of micro-organisms found within tiny globs of oil entombed in the primordial stone.

Oil made from the decomposed remains of primitive bacteria would have been expected in rocks dating from such an early stage in the Earth's history.

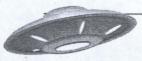
But the team found unmistakable "biomarkers" of eukaryotes, higher-order organisms in which each cell has a brain-like nucleus directing growth.

"They were our ancestors — our ultimate ancestors," said University of Washington geologist Roger Buick, the team member who found the telltale

"This is a big deal."

The scientists compared their method to the *Jurassic Park* plot in which dinosaur DNA is recovered from ancient amber.

CanWest News Service



#### THE BLUES OTHERS

Dan Aykroyd has a new video on the market, but the ex-Conehead and one-time Ghostbuster says he's not the star: The UFOs

"My recommendation is to skip through me and get to the film footage, the digital images," he said yesterday, talking about the 90minute Dan Aykroyd Unplugged on UFOs, from Union Station Media.

"This is where the whole thing starts to become more credible," he said of footage of unidentified flying objects from around the world. "This is the real stuff. I'm not alone on this. There are many, many people interested in UFOs," he said.

The DVD, which went on sale yesterday, is a conversation between Aykroyd and UFO expert David Sereda, interspersed with footage of unexplained objects in flight and comments from experts like former astronaut

> Gordon Cooper. There are no

jokes. Asked if he was worried that a comic actor might not be taken seriously discussing an edgy subject like extra-terrestrial visitors, he said, "It's not a concern. "Enough people know I've had an interest in this for years," he said, speaking from

New York. "People know I'm interested in the paranormal."

Avkrovd said he has had two personal encounters with the unknown. One occurred on Martha's Vineyard, where he saw "high-altitude, glowing magnesium discs travelling at 20,000 miles [32,190 kilometres] an hour at 100,000 feet [30,480 metres] ... wing to wing, edge to edge."

Four people with him saw the same thing, he said, though one expert later told him it was probably a meteor formation of some sort. "I believe they were visiting the Earth, passing by on the way to somewhere else.

"The second was a telepathic experience," he said, which happened at a lake retreat in Canada, "I was asleep with my wife and I woke up about 3 a.m. wanting to go outside into a field and look at the sky." Aykroyd said he told his wife, "They want me to see. They want me to see." She told him to forget it. The next morning, he said, newspapers and radio reports from across the region were filled with eyewitness accounts from some of the estimated 12,000 people who saw a pink spiral in the sky. The military later said it was a Chinese rocket, Aykroyd explained, but he believes he was being summoned and regrets ignoring the call.

Reuters

#### **MACLEAN'S JUNE 12'06**

#### The fifth dimension

The general theory of relativity states there are four dimensions: three spatial ones plus time. But physicists are exploring another A genuine lost world has been model that questions whether other dimensions could exist: does universe with a fourth spatial dimension? The idea stems from attempts to unify relativity with

of detecting high-energy gamma rays that may show the presence of the holes and, just possibly, other dimensions.

#### The lost world

found beneath Israel: scientists have found eight new species of our universe float inside a larger creatures inside a cave that was uncovered during quarry digging. The ecosystem, said to date back five million years, was comquantum mechanics through the pletely cut off from the outside possibility that small black holes, world. Scientists found crusthe mass of minor asteroids, exist taceans and other invertebrates, in the cosmos. The key is to de- all ofthemblind, indicating they'd tect the holes. Next year, NASA will lost their sight through evolulaunch a space telescope capable tion inside the lightless cave.

#### MACLEAN'S MAY 29'06 Suitable for life

Astronomers have found three planets orbiting the distant sun HD69830 that theoretically could sustain life. The outermost of the three planets is located at a distance from its sun where temperatures are moderate enough to permit water to remain liquid. It has a solid core of rock and ice and is shrouded in gas. However, because the planet is the size of our solar system's Neptune and thus many times larger than the earth, any possible life there would have to contend with heavy gravity. The system is 41 light years from the earth.

#### TORONTO STAR

SUNDAY, JUNE 11, 2006

#### BIGGEST BANG IN THE COSMOS

For real humdinger explosions, look to space with its crashing asteroids and stars being born and dying. For a long time, astronomers thought the biggest cosmic bang was when a star flamed out as a supernova.

In 1973, however, declassified observations made by U.S. military satellites monitoring atomic weaponstests revealed an even bigger bang. In a matter of seconds, these mysterious phenomena emitted 10 times as much energy as a garden-variety supernova, and a million times as much energy as our sun does in a whole year.

Based on the type of radiation, the astronomers proposed a name - gamma ray bursters but have been unsure ever since of the actual source. Now researchers at the University of Calgary and Argonne National Laboratory near Chicago have come up with the bold theory that the bursts emanate from a new kind of star not yet ob-

Call it a quark star, they told a joint meeting of the American and Canadian astronomical societies in Calgary last week.

The name sounds like an oxymoron, since quarks are the smallest building blocks in nature. As well, the particular stars involved, neutron stars, are the densest known form of matter.

Rachid Ouyed, a University of Calgary astrophysicist, says the intense pressure created by such superdensity could squeeze quarks right out of the nuclei of atoms, creating something dubbed a Quark-Nova — a super-supernova that gives off bursts of gamma rays.

If the theory is correct, says Ouyed, Quark-Novas should be common, with as many as two happening a day. The leading candidate is something called "radio-quiet neutron stars."

You can bet observatories around the world will be taking a closer look at these in the coming months.

Gene Duplantier 17 Shetland St. Toronto, Ontario Canada M2M 1X5

# Aliens quack up

# International Bird Rescue Research Center finds E.T.'s face — and a gold mine — in a duck's X-ray

Don't fear the earth-bound bird flu.

It's the aliens living in the ducks we should now be worrying about.

In the universe of UFO geeks, keeping vigilant watch on blogs and in online chatrooms, the newest evidence of something out there has been found deep inside a foul place.

It's hidden away in the belly of a mallard — then ex-

posed in an x-ray taken at a California bird sanctuary.

But more shocking to Canadians, is this galactic hitch hiker likely caught the ride in this country.

Two Sundays ago, a male duck was brought into

the International Bird Rescue Research Center in Fairfield, Calif. The facility—run by Jay Holcomb, a man who's been dubbed the RedAdair of oil spills—is a world leader in cleaning the habitats of wildlife, soiled by leaking tankers.

Thane

"It was just an ordinary male mallard, from the San Francisco bay — swollen wings and looking sick," Holcomb tells me of the Martian duck.

"We couldn't have imagined what would come of it."

#### **Angry face**

As is the norm, experts x-rayed the frail bird, to look for broken bones. But what they found, instead, was the angry face of an alien-like creature grimacing back at them

"(Staff) came to me and said, 'Do you know we have an alien in a duck,'" recalls Holcomb

What they believe was the odd positioning of food in the

bird's stomach caused a small and scary head to visually leap out of the x-ray.

They were left with a dead duck but a quirky image which has taken on a life of its own.

If thousands of dollars can be raised from a silhouette on burnt toast, Holcomb and others at the centre figured the E.T. X-ray could be worth its weight as a fundraiser.

They've created T-shirts to

tote bags with the X-ray image stamped on them — "In space, no one can hear you quack," reads the tag line on the cotton tees.

The 43-by-35cm X-ray is until bidding closes today up for sale on

eRay

Included in the posting for the item is the explanation: "The (centre's) staff discussed if an alien life form was either consumed by or trying to communicate with the people of Earth through the duck, because the centre is located in an area of California known for its mysterious crop circles."

#### **Autopsy performed**

Since aliens are notoriously short, perhaps the duck ate a young one, theorizes Karen Benzel, a centre staffer who heads the alien-in-a-duck project.

The duck died of natural causes, and not from an entity busting from its chest, centre officials say. An autopsy found grains, but no alien head.

"At least it wasn't there when we looked," says Holcomb.

"We've been around for 35 years, and have seen plenty of fish hooks in X-rays, but this is the first time we've ever

seen anything like this."

It's drawn global attention from the curious and conspiracy theorists since being posted for sale.

And saboteurs have flocked to the site to post nasty comments and try to place false bids.

"Most people have taken it the right way — that we're trying to use it to help these birds," says Holcomb.

"But a few take it too seriously, or are nasty."

There is chatter on some blogs, wondering whether aliens may be using this as a duck call to contact humans.

Holcomb — who worked on the Exxon Valdez spill in 1989 — thinks the alien is just assorted seeds.

#### Intelligent life

But he's philosophical about why a mallard would make a good first contact.

"We think these animals are incredible beings," he says — of the birds, not the scary aliens.

"Just look at our world. We're killing it through apathy. If anything, I think a wild animal would be the way an alien would look for intelligent life."

As Holcomb and his crew debate changing their centre designation from "international" to "extraterrestrial" or even 'intergalactic,' he points out believers in little green men in little brown ducks can trace the origins of the story to Canada.

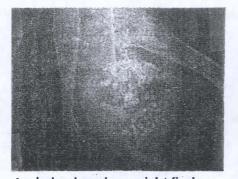
They believe the duck made its way from this country before setting down in California.

"Maybe they're among you now," Holcomb says before quacking up.

So when the flying saucers suddenly appear over Toronto, there's only one thing to

Duck.

thane.burnett@tor.sunpub.com



Look closely and you might find an image of an alien's face in this X-ray of a mallard Clower section of foll x-ray)

MACLEAN'S MAY 15 '06

#### Vanishing trick

Cloaking devices, a fictional technology used on Star Trek to make spaceships invisible and undetectable, could in fact work. Two mathematicians, Nicolae Nicorovici and Graeme Milton. have proposed a device they call a "superlens" that could make vehicles appear to vanish. By using a phenomenon called "anomalous localized resonance," a cloaking effect would exploit light waves much in the way that a humming tuning fork placed next to a wine glass can make the glass hum. Resonance could cancel the light waves bouncing off a vehicle, rendering it invisible. While the two claim to have worked out the mathematics, they admit that practical construction is a long way off.

#### MACLEAN'S MAY 22'06

#### The big cube

The largest scientific instrument ever created is under construction at the South Pole. Known as IceCube, the neutrino telescope will encompass one cubic kilometre. Its purpose is to measure cosmic neutrinos as they pass through the earth. Neutrinos are created by violent events in space such as black holes. After boring holes in the ice, scientists are dropping in strings of sensors. Why the elaborate device? Although they are common, neutrinos are extremely difficult to detect.

#### WULFF-DIETER HEINTZ

#### **Astronomer led** theories about double stars

Wulff-Dieter Heintz, an astronomer who was a leading investigator of the fiery evolution of linked pairs of stars that appear to be a single star, died June 10 in Swarthmore, Pa. He was 76.

The cause was lung cancer.

Beginning in the 1960s, Heintz, an astronomer at Swarthmore College, studied so-called visual double stars to calculate the orbit of each star in a pair. It was then possible to determine the stars' mass and predict their fate, whether they would flare into a white dwarf or disappear into a black hole.

In 1978, Heintz published a book, Double Stars, that became a "standard in the field, covering the subject in its entire length and

breadth," said Harry J. Augensen, associate dean of science and a professor of physics and astronomy at Widener University.

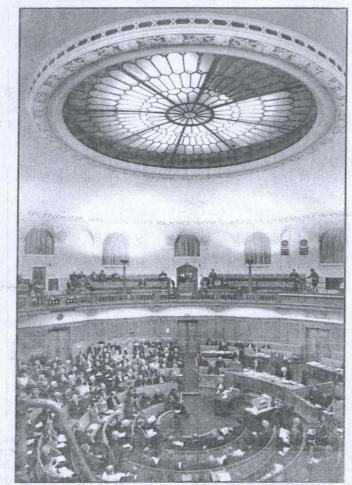
In other research, Heintz studied features on the surface of Mars and contributed to the measurement of about 900 newly observed pairs of double stars. In the late 80s, he pursued a theory - later challenged — that an interstellar object known as Wolf-424 was actually a pair of failed stars, also called brown dwarfs.

Subsequent observations made through the Hubble Space Telescope in the 1990s proved that Wolf-424 is a pair of low-mass stars called red dwarfs, Augensen said.

Wulff-Dieter Heintz was born in Wuerzburg, Germany. He earned his doctorate in astronomy from the University of Munich in 1953.

Heintz served as chairman of Swarthmore's astronomy department from 1972 to 1982. He was named a professor emeritus in

The New York Times



(C) PA PHOTOS LIMITED

Some leaders from Britain's Anglican church have called for the church to apologize to Muslims for wrongs done by the West. Above, the Synod of the Church of England.

TORONTO SUN WEDNESDAY, JUNE 28, 2006

#### 2,000-year-old observatory

SAO PAULO (AP) - A Stonehenge-like grouping of granite blocks along a grassy Amazon hilltop in Brazu may be the vestiges of a centuriesold astronomical observatory. archeologists said yesterday.

"We may be also looking at the remnants of a sophisticated culture," archeologist Mariana Petry Cabral said.

The 127 blocks, some three metres tall, are spaced at regular intervals around the hill, like a crown 30 metres in diameter.

On the shortest day of the year - Dec. 21 - the shadow of one block disappears when the sun is directly above it.

"It is this block's alignment with the winter solstice that leads us to believe the site was once an astronomical observatory," said Cabral, who has studied the site for a year.

She believes it was once inhabited by the ancestors of the Palikur Indians, and says pottery shards indicate they are as much as 2,000 years old.

WEDNESDAY, MAY 10, 2006

#### More galaxies in Milky Way

SPACE Two dim dwarf galaxies are the Milky Way's newest-known galactic companions, astronomers report. This brings the total number of dwarf galaxies in the Milky Way's cosmic neighborhood to 14. But theorists believe there could conceivably be hundreds more. The two newly detected dwarfs were found in the direction of the constellations Canes Venatici (the hunting dogs) and Bootes (the herdsman), scientists studying the Sloan Digital Sky Survey said in a statement.

The little galaxy found in Canes Venatici is about 640,000 light-years from the Sun, a stone's throw in cosmic terms. A light-year is about 6 trillion miles, the distance light travels in a year. The dwarf found in Bootes is about the same distance from the Sun.

THE GLOBE AND MAIL MONDAY, JUNE 5, 2006

#### This hungry galaxy

"The serene beauty of the Milky Way in the night sky belies our galaxy's predatory nature," writes Robert Cowen in The Christian Science Monitor. "It

grows by devouring smaller companion galaxies and star clusters. A new star map shows that this is going on to a far greater extent than astronomers had realized." A

global collaboration of astronomers called the Sloan Digital Sky Survey reported the finding last month

TORONTO SUN WEDNESDAY, JUNE 21, 2006

Man or monkey god?

KOLKATA - Thousands of people are flocking to an impoverished Indian village to worship a man they believe possesses divine powers because he climbs up trees in seconds, gobbles up bananas and has a "tail."

Devotees say villager Chandre Oraon, 27, is an incarnation of the Hindu monkey god Hanuman.

Doctors said the "tail" made up of some flesh but mostly of dark hair - was just a rare physical attribute.

- Sun wire services

TORONTO SUN FRIDAY, APRIL 21, 2006

#### **Pyramid in Balkans?**

VISOKO, Bosnia-Herzegovina - Researchers unearthed geometrically cut stone slabs on Wednesday that they said could form part of the sloping surface of what they believe is an ancient pyramid lying beneath a huge hill.

Sun wire services

#### Mooning about

"I see the moon.' Many countries are talking about sending



people to the moon but only two, China and the United States, have set dates for manned landings: as early as 2017 and 2018, respectively. Although Japan has yet to

launch a manned flight of its own, that country has a tentative date for a moon landing in 2025. Nigeria, which launched its first satellite three years ago, has a program to land a probe on the moon by 2030.

#### Seeking alien flashers

BOSTON - A new telescope in Massachusetts is designed to capture possible light signals transmitted to Earth by extraterrestrials.

It's the first to be developed solely to search for light pulses from aliens and will be able to cover 100,000 times the amount of sky covered by current equipment, its developers said.

-Sun wire services

MARCH 15, 2006 • 24 HOURS

# Space travel set to take off

If floating weightless and peering down on Earth sounds appealing, you might consider being a space tourist. As long as you've got a fat wallet.

Two years after the first privately financed space flight jump-started a sleepy industry, more than a dozen companies are developing rocket planes to ferry ordinary rich people out of the atmosphere.

Several private companies will begin building their prototype vehicles this summer with plans to test fly them as early as

next year. The first tourist could hitch a galactic joy ride late next year or 2008.

Unlike the Cold War space race between the U.S. and Soviet Union that sent astronauts to the moon, this competition is bankrolled by entrepreneurs whose competition could one day make a space trip cheap enough for the average Joe.

This time, it's personal. This space race is about getting 'us' into space,' said space historian Andrew Chaikin.

- The Associated Press

#### Einstein Mystery

**BV KAT PIPER** and IASON WYATT

Epoch Times Australia Staff

Cyclic creation and destruction of the universe could explain a mystery that has had physicists puzzling for decades—why the "cosmological constant" (related to the energy in the vacuum of space and contributing to the expansion of the universe) has a value that is "improbably perfectly" suitable for the formation of stars and planets.

Paul Steinhardt of Princeton University in the U.S.A. and Neil Turok of Cambridge University in the U.K. think the "cyclical universe" theory might explain the mystery.

Einstein first introduced the cosmological constant in his theory of general relativity in the 1920s as a way to mathematically explain why the universe didn't contract under the force of gravity.

He later discarded the idea as his "biggest blunder" when Hubble redshift was discovered. Redshift showed that stars were receding in all directions, so the universe was expanding and not static as Einstein had be-

However, scientists recently became interested in the cosmological constant again when it was discovered that the universe is not only expanding, but at an increasing rate. Einstein's cosmological constant formula models this observation well.

The mystery to physicists is, if the cosmological constant is used to approximate the expansion of the universe, why is its value a googol (1 followed by 100 zeros) times smaller than would be expected if the universe had formed under the standard "big bang theory?"

Scientists have tried various mechanisms to solve this question, but for the cosmological constant to reach the present estimated

value it would take far longer than the 14 billion years our universe is said to have been in existence—so long that all matter in the universe would dissipate in the meantime.

But, say Drs. Steinhardt and Turok in the recent edition of Science, if time existed before the "big bang," and if matter was recreated every trillion years or so, the cosmological constant would have plenty of time to decline to the level observed today.

In their "cyclic universe" theory, the universe spends most of its time with a small cosmological constant, and the repeated creation of matter means that each expansion cycle would include a significant amount of matter, as we see today.

Other theories attempting to explain the mystery include the "anthropic principle" which says that the cosmological constant has different values in different parts of the universe. This theory proposes that we live in a rare region of space where the cosmological constant happens to have a low value, suitable for the formation of stars, planets

Another popular idea is "string theory," which suggests that there are billions of different universes, each with different cosmological constants and even different laws of

"With an infinite number of universes, there is bound to be one with a cosmological constant like ours," said the founder of string theory, Dr. Leonard Susskind in an interview with New Scientist last year.

Although new to science, the theories of multiple and cyclical universes have featured in the beliefs of ancient cultures such as the South American Mayans and various religions since ancient times.

#### TORONTO STAR TUESDAY, JULY 4, 2006 ★

#### ➤ The End

➤ Death From Above: Between 700 and 800 asteroids greater than a kilometre in width are slipping in and out of the blackness surrounding Earth. "If one of those hit, basically, it will take out a continent," says Al Globus, senior research associate at the San Jose State University. "About half of those will eventually hit Earth . Nowwhen we say eventually, that could mean millions or billions of years. But, eventually."

The last major catastrophic as- ID@thestar.ca

teroid collision likely set the atmosphere afire, Globus says. If another hit the ground, a Mad Maxian reality would be optimistic. Two-thirds of the Earth's surface is oceanic and if an asteroid hit in the water, it would create a tsunami large enough to wipe out Florida.

But, Globus adds, space is big. A major meteor hit in the next hundred years is well within the realm of improbability. In the meantime, scientists are looking for a way to track killer space rocks and deflect them.

And if all that doesn't get us, there are always the aliens...

• The Epoch Times • May 4 - 10, 2006

# One Universe or Many:

VOA News

One of the hottest - and most mind-bending - questions in modern physics is whether the universe we inhabit is the only one, or if there are an infinite number of alternative universes in higher dimensions beyond those we know, or perhaps could know.

Once upon a time, people were certain that the earth was at the center of the universe, and that everything revolved around it. Later, astronomers proved that wasn't the case – that the earth revolves around the Sun, which is just another star in the Milky Way galaxy, which, it later turned out, is not unique either; the Milky Way is just one of many galaxies. But at least there is just one universe, right? Well, maybe not.

"Previously we thought that the whole universe is like one expanding balloon," says Stanford University physicist Andrei Linde, who originated the so-called "inflationary" or "multiverse" theory, which plausibly asserts the existence of several universes, each with its own set of laws, "But then we learned that this balloon creates new balloons, these balloons create new balloons. And this process goes on forever...."

At a recent debate at New York's American Museum of Natural History, Linde said that colleagues who dismiss the inflationary cosmology out of hand remind him of his childhood in the Soviet Union, when both East and West were certain they had the one true ideology.

"In physics," he said, "there is also an ideology. We want to find one unique rule which rules the whole universe, the best rule, the only possible rule -- and that's the goal of physics. But the goal of physics may be more democratic. It may allow [a] universe of this type and a universe of that type." "And," he added, "until you prove it is absolutely necessary for the entire universe to follow just one rule prescribed to us, the multiverse theory will be alive."



Michio Kaku, a leading theoretical physicist and the author of Parallel Worlds, has no problems accepting the theory. In fact, Kaku is a co-founder of a branch of "String Theory" physics which is consistent with the inflationary, multiverse model. To explain his theory to the lay public, Kaku often likens the universe to a musical string, with subatomic particles as its "notes."

"And physics would be the harmonies you could write on these vibrating strings. Then what is chemistry? Chemistry is the melodies you can play on these strings. What is the universe? The universe is the symphony of strings. Then what is the mind of God? The mind of God that Einstein spent thirty years of his life trying to read would be cosmic music resonating through eleven- dimensional hyperspace!"

Kaku went on to assert, that, if that picture is correct, "then our universe is a 'soap bubble' of some sort existing with other soap bubbles. And our multiverse is like a bubble bath with universes popping into existence, budding, sprouting, colliding with other universes."

Cosmologist Lawrence Krauss, an astronomy professor at Case Western Reserve University, is a skeptic. He says that multiverse theory may be all-too-human wishful thinking.

"We don't want to be alone," he says. "It would be nice if our universe weren't the only one. In fact, it would be nice if there were universes that were better than ours!" Krauss says, that as a scientist, he knows that "every time we open up a new window on the universe, we're

likely to be surprised. But to say with any kind of supposed certainty that we know that space and time at some scale is full of 'bubbles' is science fiction in the extreme!"

But much of what is called science fiction one day becomes science fact the next day. Lisa Randall is a theoretical physicist at Harvard University, and the author of Warped Passages: Unraveling the Secrets of the Universe's Hidden Dimensions. She agrees that it may be impossible to directly observe other universes or higher dimensions from within this universe or dimension. "... But the only way to know if there are other things to observe is if we think about them in the first place."

Randall points out that there are practical questions that might be answered by those inquiries -- such as why gravity seems to be so weak compared to electromagnetism, and other fundamental nuclear forces.

"It could be that gravity is in fact as strong as those other forces but it's somewhere else in a higher dimensional universe – it's not where we are." And she adds that it is interesting to think about these things. "But it is most interesting to think about how we can access them. Do they have any influence on our world? Is there any way of testing these ideas?"

There may be. The world's most powerful particle accelerator is switched on next year in Switzerland. The Large Hadron Collider, as the atom-smasher is known, may reveal new information about the forces that hold together this universe... and maybe others.

10