

# A long, long time ago in a galaxy far, far away ...

## Scientists claim they’ve seen the oldest light so far

The Associated Press

WASHINGTON — Astronomers believe they have found the oldest thing they have ever seen in the universe: It is a galaxy far, far away from a time long, long ago.

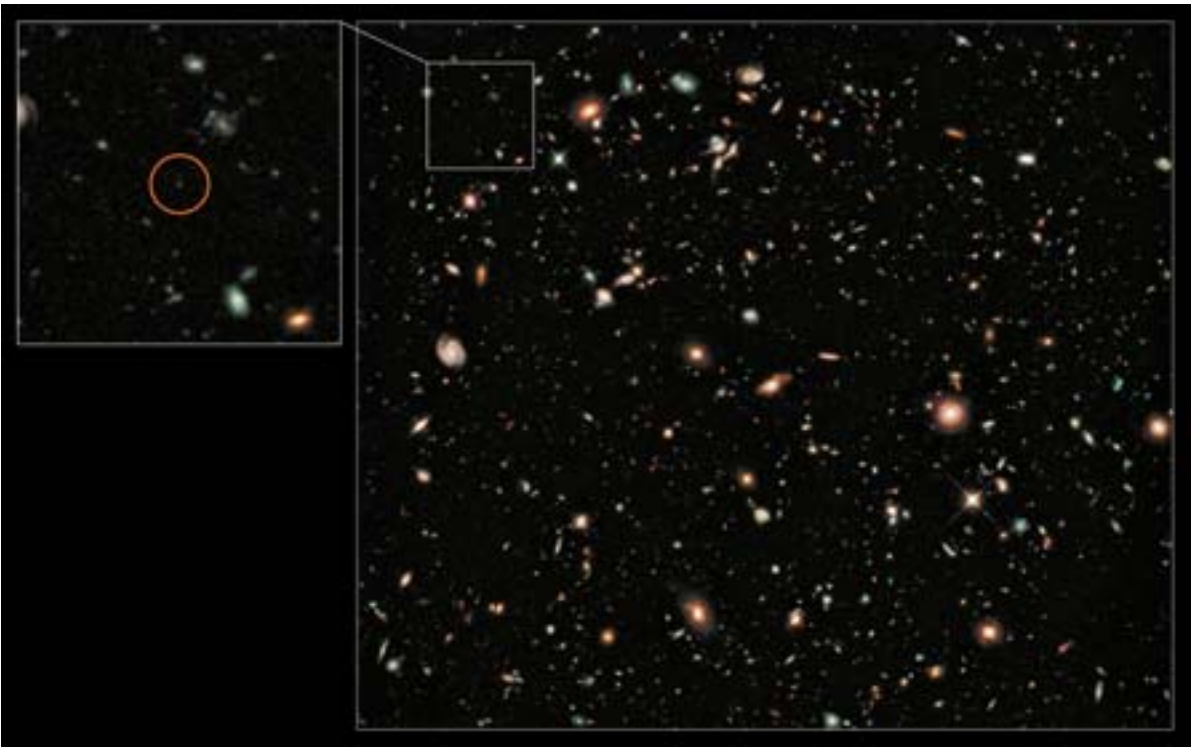
Hidden in a Hubble Space Telescope photo released earlier this year is a small smudge of light that European astronomers now calculate is a galaxy from 13.1 billion years ago. That is a time when the universe was very young, just shy of 600 million years old. That would make it the earliest and most distant galaxy seen so far.

By now the galaxy is so ancient it probably doesn’t exist in its earlier form and has already merged into bigger neighbours, said Matthew Lehnert of the Paris Observatory, lead author of the study published online Wednesday in the journal Nature.

“We’re looking at the universe when it was a 20th of its current age,” said California Institute of Technology astronomy professor Richard Ellis, who wasn’t part of the discovery team. “In human terms, we’re looking at a four-year-old boy in the life span of an adult.”

While Ellis finds the basis for the study “pretty good,” there have been other claims about the age of distant space objects that have not held up to scrutiny. And some experts have questions about this one. But even the skeptics praised the study as important and interesting.

The European astronomers calculated the age after 16 hours of



Astronomers using ESO’s Very Large Telescope (VLT) have now measured the distance to the most remote galaxy so far, UDFy-38135539 (the faint object shown in the excerpt on the left), which we see as it was when the universe was only about 600 million years old. These are the first confirmed observations of a galaxy whose light is clearing the opaque hydrogen fog that filled the cosmos at this early time.

Photo courtesy of NASA, ESA, G. Illingworth (UCO/Lick Observatory and University of California, Santa Cruz) and the HUDF09 Team

observations from a telescope in Chile that looked at light signatures of cooling hydrogen gas.

Earlier this year, astronomers had made a general estimate of 600 to 800 million years after the Big Bang for the most distant fuzzy points of light in the Hubble photograph, which was presented at an astronomy meeting back in January.

In the new study, researchers fo-

cused on a single galaxy in their analysis of hydrogen’s light signature, further pinpointing the age. Garth Illingworth of the University of California, Santa Cruz, who was the scientist behind the Hubble image, said it provides confirmation for the age using a different method, something he called amazing “for such faint objects.”

The new galaxy does not have a name - just a series of letters and

numbers. So Lehnert said he and colleagues have called it “the high red-shift blob.” Because it takes so long for the light to travel such a vast time and distance, astronomers are seeing what the galaxy looked like 13.1 billion years ago at a time when it was quite young - maybe even as young as 100 million years old - Lehnert said. It has very little of the carbon or metal that we see in

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— RICHARD ELLIS, ASTRONOMY PROFESSOR

more mature stars and is full of young, blue massive stars, he said.

What is most interesting to astronomers is that this finding fits with theories about when the first stars and galaxies were born. This galaxy would have formed not too soon after them.

“We’re looking almost to the edge, almost within 100 million years of seeing the very first objects,” Ellis said. “One hundred million years to a human seems an awful long time, but in astronomical time periods, that’s nothing compared to the life of the stars.”

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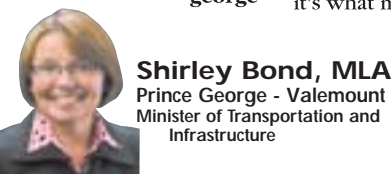
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## It’s Ignatieff’s fault, say third of Canadians

Poll finds 31 per cent blames Liberal leader for UN embarrassment

The Canadian Press

OTTAWA — Nearly a third of Canadians accepted the Conservative government’s claim that Liberal Leader Michael Ignatieff cost the country a seat on the United Nations Security Council, a new poll suggests.

Some 31 per cent of respondents in The Canadian Press-Harris Decima survey said they thought “public criticism” by Ignatieff caused Canada to lose a three-country contest for two seats on the UN’s most powerful body.

Canada suffered a historic loss last week to economically troubled Portugal in a bid for a temporary seat on the Security Council. After six successful attempts, it was the first time since the UN’s creation after the Second World War that Canada did not win a seat on Security Council.

In the immediate aftermath, Foreign Affairs Minister Lawrence Cannon and Prime Minister Stephen Harper’s chief spokesman, Dimitri Soudas, blamed Ignatieff, who weeks earlier openly questioned whether Canada had “earned” a seat this time around.

Harper has distanced himself from that initial attack on Ignatieff. He instead questioned the nature of the secret ballot, saying that Canada had enough written assurances of support to prevail.

Fifty per cent of those polled blamed “the government’s recent record on international diplomacy” for the loss, but Ignatieff came in a close second.

In the Tory stronghold of Alberta, the blame was split evenly, 39-39, between the government and Ignatieff.

“I’d say it’s a significant number. Certainly more people put the blame at the feet of the government, but that 31 per cent cite Mr. Ignatieff’s comments does show there’s a sense that the comments were probably ill advised,” said pollster William Murray.

Three weeks before the vote, Ignatieff said on Parliament Hill: “I know how important it is for Canada to get a seat on the Security Council but Canadians have to ask a tough question: Has this government earned that place?”

“We’re not convinced it has.”

Most of those surveyed (51 per cent) were surprised Canada did not win, while 44 per cent said they were not surprised, the poll found.

Younger, more affluent Canadians and Ontario residents were more likely to be surprised at the loss, while a majority of Quebecers were the least surprised by Canada’s failure.

The loss has set off a fresh round of introspection in Canada.

On Tuesday, New Democrat foreign affairs critic Paul Dewar tabled a motion with the House of Commons foreign affairs committee to establish “select panel of experts” to review Canadian foreign policy.