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Astronomers Claim to Have Seen the First Light of the Universe

Light from the first objects in the Universe?

Astronomers claim to have captured images showing the very first light that appeared in the Universe. Using NASA's Spitzer Space Telescope and a new digital technique, they took a picture of the sky and saw light originating from the first stars that appeared in the Universe, more than 13 billion light-years away. Using very deep exposures, they took pictures of clusters of bright, supermassive stars, more than 1,000 times the mass of our sun, then they subtracted away light from every known possible source. They were left with a faintly glowing pattern of background light, which they claim to come from an unknown source. The obvious supposition was that this light had been produced right after the Big Bang, by the first giant stars. The technique was then applied again to five different areas in the sky, using different wavelengths, producing the same results. "There's ongoing debate about what the first objects were and how galaxies formed," said Dr. Harvey Moseley of Goddard, a co-author on the papers that presented the discovery. "We are on the right track to figuring this out. We've now reached the hilltop and are looking down on the village below, trying to make sense of what's going on." Dr. Alexander Kashlinsky of NASA's Goddard Space Flight Center, Greenbelt, Md., the lead author of the paper, said that "whatever these objects are, they are intrinsically incredibly bright and very different from anything in existence today." The initial finds will hopefully be clarified by NASA's James Webb Space Telescope (JWST), a planned space infrared observatory, intended to be a significant improvement on the aging Hubble Space Telescope, which is about to be decommissioned, after successfully serving its purpose since 1990. The idea of actually seeing the light produced by millions of first generation stars, accumulated over billions of years, is very appealing, but further scientific investigations are needed to prove that no other, unknown source produced this residual light.