

Japan astronomers find most distant galaxy cluster

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This 2008 handout photo from NASA shows the Coma Cluster of galaxies captured by the Hubble Space Telescope. Japanese astronomers said Wednesday they had found a cluster of galaxies 12.72 billion light-years away from Earth, which they claim is the most distant cluster ever discovered.

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Using a powerful telescope based in Hawaii, the team peered back through time to a point just one billion years after the Big Bang, the birth of the universe.

"This shows a galaxy cluster already existed in the early stages of the universe when it was still less than one billion years into its history of

13.7 billion years," the team of astronomers said in a press release.

The discovery was jointly made by researchers from the state-run Graduate University of Advanced Studies and the [National Astronomical Observatory](#) of Japan using the [Subaru Telescope](#) in Hawaii.

They found a "protocluster of galaxies", which is expected to help scientists understand the structure of the universe and how galaxies developed.

The study is to be published in the *Astrophysical Journal* of the United States.

Researchers using NASA's [Hubble Space Telescope](#) have previously announced the discovery of a possible [cluster of galaxies](#) around 13.1 billion light-years from Earth, but that has not yet been confirmed, the Japanese researchers said.

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