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<p><b>Hubblecast Episode 26: Exceptionally deep view of strange galaxy</b></p> <p><b>EMBARGOED UNTIL 12:00 (CET)/04:00 am EST 05 Feb, 2009</b></p>	
<p><b>00:00</b> <b>[Visual starts]</b></p> <p><b>00:00</b> <b>[Narrator]</b> A spectacular new image of an unusual spiral galaxy in the Coma Galaxy Cluster has been created from data taken by the Advanced Camera for Surveys on the NASA/ESA Hubble Space Telescope. It reveals lots of new details in the galaxy, NGC 4921, as well as an extraordinary rich background of more remote galaxies stretching back to the early Universe.</p> <p><b>00:19</b> <b>[Intro]</b></p> <p><b>00:35</b> <b>[Woman]</b></p> <p>This is the Hubblecast!</p> <p>News and images from the NASA/ESA Hubble Space Telescope.</p> <p>Travelling through time and space with our host, Dr. J. a.k.a. Dr. Joe Liske.</p> <p><b>00:47</b> <b>[Richard Hook]</b> Hello, and welcome to another episode of the Hubblecast. I am Richard Hook from ESO. Our usual host, Dr J, has just had a baby daughter and will be on paternity leave for a while. So I am here at short notice to tell you about the latest image from Hubble — a rather strange and ghostly galaxy.</p> <p><b>01:00</b> <b>[Richard Hook]</b> The Coma Galaxy Cluster, in the northern constellation of Coma Berenices, the hair of Queen Berenice, is one of the closest very rich collections of galaxies in the nearby Universe and contains more than 1000 members. The brightest</p>	<p>Zoom into image of NGC 4921</p> <p>Pan</p> <p>EPISODE 26: Exceptionally deep view of strange galaxy</p> <p>RNH voice-over</p> <p>Name: RNH Episode: Exceptionally deep view of strange galaxy</p> <p>Topic: Galaxy clusters Vodcast No.: 2009/01</p> <p>Zoom</p>

galaxies, including the one called NGC 4921, which we are going to talk about today, were discovered back in the late 18th century by the great astronomer William Herschel.

Rich clusters like Coma are pretty crowded places and galaxies undergo many interactions and mergers. This constant slow activity gradually turns spiral galaxies, which are rich in dust and gas, into cleaner elliptical systems without much active star formation. As a result there are far more ellipticals and fewer spirals in the Coma Cluster than are found in quieter corners of the Universe.

**01:45**

**[Richard Hook]**

The new Hubble pictures shows NGC 4921, which is one of the rare spirals in Coma, and a rather unusual one — it is an example of an "anaemic spiral" where the normal lively star formation that creates a spiral galaxy's familiar bright arms is much less intense. Because of this we can just see a delicate swirl of dust in a ring around the galaxy, accompanied by some bright young blue stars in clusters that are clearly separated out by Hubble's sharp vision. Much of the pale spiral structure in the outer parts of the galaxy is unusually smooth and gives the whole galaxy the ghostly look of a vast translucent jellyfish.

**02:10**

**[Richard Hook]**

This very long-exposure Hubble picture shows us lots of fine detail of the galaxy and the Universe beyond.

If we look more closely in the middle we can see that this galaxy has a bright nucleus with a straight "bar" extending to each side. Further out we can see a ring of dust and lots of hot young blue stars in clusters.

Galaxies are quite transparent and we can see right through to much more remote galaxies far beyond.

Further out we can see lots of dots that look a little like stars. These are actually very faint globular star clusters – huge balls of stars slowly orbiting the galaxies in the cluster.

The image is filled with thousands of fainter and more distant galaxies of all shapes and sizes. Some are normal but many of the fainter ones are blobby and chaotic star-forming clumps back in the early Universe, far, far beyond the huge galaxy in the foreground.

Also seen are foreground stars in our own Milky Way.

Many galaxies have companions and NGC 4921 seems to be no exception. We can see several faint patches that are most likely to be smaller satellite systems orbiting their huge parent.

**03:00**

**[Richard Hook]**

Thanks for joining me for a quick tour of this stunning view of NGC 4921 – a vast translucent jellyfish of a galaxy.

Richard Hook voice-over

PAN

Image marked with locations of described objects

Richard Hook voice-over

This is Richard Hook, signing off for the Hubblecast. Once again, nature has surprised us beyond our wildest imagination.

**03:15**  
**[Outro]**

**END**

Zooming on NGC  
4921

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produced by  
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