Admire the image of the strange jellyfish galaxy through the eyes of the Hubble telescope

The jellyfish galaxy JO206 is at the center of a stunning new image captured by Hubble's Wide Field Camera 3 system.

NASA/ESA's Hubble Space Telescope continues to show its importance in the field of astronomical research, bringing to humanity a one-of-a-kind image of a galaxy with an extremely unusual shape just like its name: The Jellyfish Galaxy.

The jellyfish galaxy JO206 is at the center of a stunning new image captured by Hubble's Wide Field Camera 3 system. Located 700 million light-years from Earth in the constellation Aquarius, JO206 is still visible with the intense light at the center of the galaxy, along with the long veins it extends to the lower right, indicating regions of strong interaction. These same veins are what give the galaxy its unique shape, reminiscent of a giant jellyfish floating in the depths of space.

In theory, when a galaxy passes through a galaxy cluster, it not only moves through empty space. It also glides through clouds of diffused plasma gas, known as the medium inside the cluster, which is hotter than the surrounding space outside the cluster. As the galaxy moves through this medium, it creates drag that pushes gas out of the galaxy and forms long 'tails' that run behind the main body of the galaxy - the jellyfish's tentacles.

In the past, Hubble has also photographed a number of other jellyfish galaxies, such as JO201 and JW100. This space telescope is often used to study jellyfish galaxies in general because the rate of star formation in their tails is so high, and astronomers want to understand how star formation differs when it occurs far from the center of a galaxy. But it turns out the process seems to be very similar, whether it happens at the center of the jellyfish galaxy or at the edge of its tail (tentacles).