



6

GALLERY

NGC 4921

The Coma Galaxy Cluster is one of the closest very rich collections of galaxies in the nearby universe. The galaxies in rich clusters undergo many interactions and mergers that tend to gradually turn gas-rich spirals into elliptical systems without much active star formation. NGC 4921 is one of the rare spirals in the Coma Cluster and a rather unusual one — with just a delicate swirl of dust in a ring around the galaxy. 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 jelly-fish. An extraordinary rich background of more remote galaxies stretching back to the early universe is also seen.

Interacting galaxies are found throughout the universe, sometimes as dramatic collisions that trigger bursts of star formation, on other occasions as stealthy mergers that result in new galaxies. Each of the various merging galaxies in this gallery is a snapshot of a different instant in the long interaction process. Many of the Hubble images seen here were taken as part of a large investigation of luminous and ultraluminous infrared galaxies called the Great Observatories All-sky LIRG Survey.



ARP 194

This uniquely interacting group contains two distinct components connected by a cosmic fountain of stars, gas, and dust that stretches over 100,000 light years. The compact bright starbirth regions are young super star clusters that formed as a result of the interaction. The gravitational forces involved in a galaxy interaction can enhance the star formation rate and give rise to luminous bursts of star formation in merging systems.