

SPACE SCOOP
NEWS FROM ACROSS THE UNIVERSE



May the Force be with You
Dec. 17, 2012

The beautiful galaxy in this space picture is part of a system of three galaxies bound together by gravity, called the 'Leo Triplet'. Its perfect spiral shape has been pulled out of shape by its neighbours. Can you see that it's longer on the right side? This is because the three galaxies are constantly tugging at each other.

Gravity is something we mention a lot when talking about astronomy, because it plays such an important role in shaping our Universe. Gravity is a force that attracts all objects that have weight to each other. It is why we don't fall off the Earth even though it is round. The heavier an object is, the stronger its gravitational pull is. This is why gravity on the Earth is stronger than on the moon, and why people feel lighter on the moon (about six times lighter, in fact!). This is also why astronauts float around out in space, far from any planets or stars.

Gravity doesn't just keep humans on the Earth, it also keeps the planets in our Solar System tied to the Sun. It keeps the gas, dust and millions of stars of our Galaxy (the Milky Way) together. Even galaxies don't wander through space alone, there are also groups of galaxies that are bound together. The Milky Way is one of over 40 galaxies in our galactic group! The Leo Triplet group is much smaller, it only includes just three galaxies. You can see a picture of the entire group here.

▲ COOL FACT!

Don't get gravity mixed up with magnetism. Magnetism is also an invisible force that can attract objects to each other. However, it only works with certain materials, and it can also push objects away from each other.