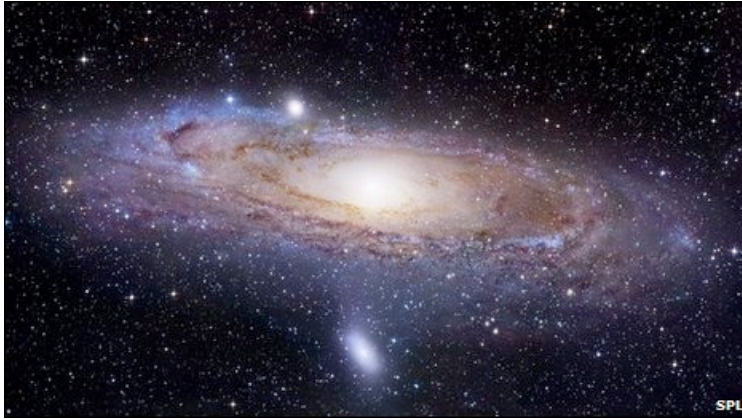


## Galaxy's 'cannibalism' revealed



The Andromeda galaxy is still expanding

The vast Andromeda galaxy it's appeared to have expanded by digesting stars from other galaxies, researches has shown.

When an international team of scientists mapped Andromeda, they discovered stars that they said were "remnants of dwarf galaxies".

The astronomers report their findings in the journal Nature.

This consumption of stars has been suggested previously, but the team's ultra-deep survey has provided detailed images to show that it took place.

This shows the "hierarchical model" of galaxy formation in action.

The model predicts that large galaxies should be surrounded by relics of smaller galaxies they have consumed.

The scientists charted the outskirts of Andromeda in detail for the first time.

They discovered stars that could not have formed within the galaxy itself.

Pauline Barmby, an astronomer from the University of Western Ontario who was involved in the study, told BBC News the pattern of the stars' orbits revealed their origin.

"Andromeda is so close that we can map out all the stars," she said.

"And when you see a sort of lump of stars that far out, and with the same orbit, you know they can't have been there forever."

**“ Ironically, galaxy formation and galaxy destruction seem to go hand in hand**

Dr Scott Chapman  
University of Cambridge

Andromeda, which is approximately 2.5 million light years away from Earth is still expanding, say the scientists.

The researchers also saw a "stream of stars" of a nearby galaxy called Triangulum "stretching" towards Andromeda.

Dr Scott Chapman, reader in astrophysics at the Institute of Astronomy, University of Cambridge, was also involved in the research.

He said: "Ultimately, these two galaxies may end up merging completely.

"Ironically, galaxy formation and galaxy destruction seem to go hand in hand."

Nickolay Gnedin, an astrophysicist from the University of Chicago, who was not involved in this study, described the work as showing "galactic archaeology in action".