

In the center of the galaxy is the bar-shaped galactic bulge which harbors a supermassive black hole with a mass equal to that of about 4 million suns.

Surrounding the central bulge is a relatively thin disk of stars about two thousand light years thick and roughly 100,000 light years across.

EARTH

100,000 Light Years

0.04 Light Seconds

> Surrounding the thick Galactic disk is an extremely faint halo that contains the oldest stars in the Galaxy. These stars are located in globular clusters, dense swarms of about 100,000 stars.



The Sun and its planetary system formed in the outer reaches of the Milky Way about 4.5 billion years ago.

In several billion years it is likely that the Milky Way and Andromeda will collide and merge to form one huge elliptical galaxy.

IKY

Andromeda Triangulum Galaxy Galaxy

Milky Way Galaxy

The Milky Way is not an island universe, but a member of a small cluster of galaxies

The word meaning "milky cincle" or more that a It is thought that the various components of our Galaxy were put together about 12 billion years ago through a succession of mergers that are continuing even today.

> Clouds of gas are observed to be falling into our galaxy, and recent evidence indicates that a small galaxy on the far side of the Milky Way is being torn apart and assimilated

called the Local Group.

into the Galaxy.

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