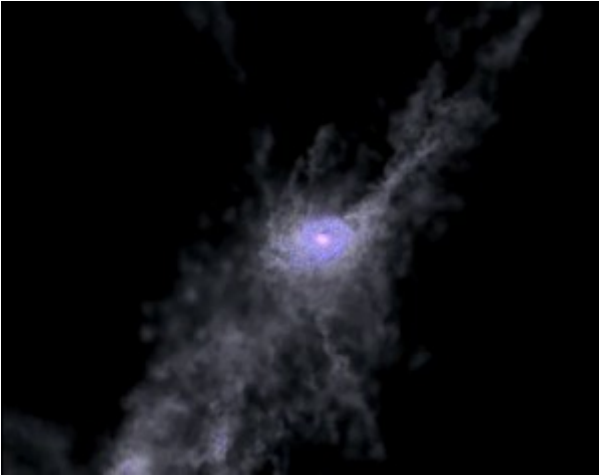


Probable hydrogen river observed flowing through space

Astronomers from West Virginia University have spotted what could be a hydrogen river floating through space. Galaxies have different shapes, and more than half of the known galaxies have a spiral form. In fact, the Milky Way has a barred spiral shape, which means it has a central bar-shaped structure composed of stars. Spiral galaxies tend to keep a steady pace of star formation, which can be slow or active.

THURSDAY, 6 FEBRUARY 2014



Scientists have wondered what fuels this star formation process, and one of the most important theories is that hydrogen rivers, also known as cold flows, provide the energy for continuous star formation. These cold flows come from intergalactic space and have never been heated to extreme temperatures. Hydrogen rivers however have not been observed so far.

Using the Robert C. Byrd Green Bank Telescope (GBT), the world's largest fully steerable telescope, astronomer D. J. Pisano observed what could indeed be a hydrogen river located near the NGC 6946 galaxy, around 22 million light years away from Earth. Other telescopes lacked the needed resolution to observe such a tenuous light. Future studies and observations may discard alternative explanation for this phenomenon, and

may share light to the role that cold flows may play upon the transformation of galaxies.

DOI: 10.1088/0004-6256/147/3/48

Written by Ornela De Gasperin.

Browse international scientific events,
from conferences to seminars

nature
careers