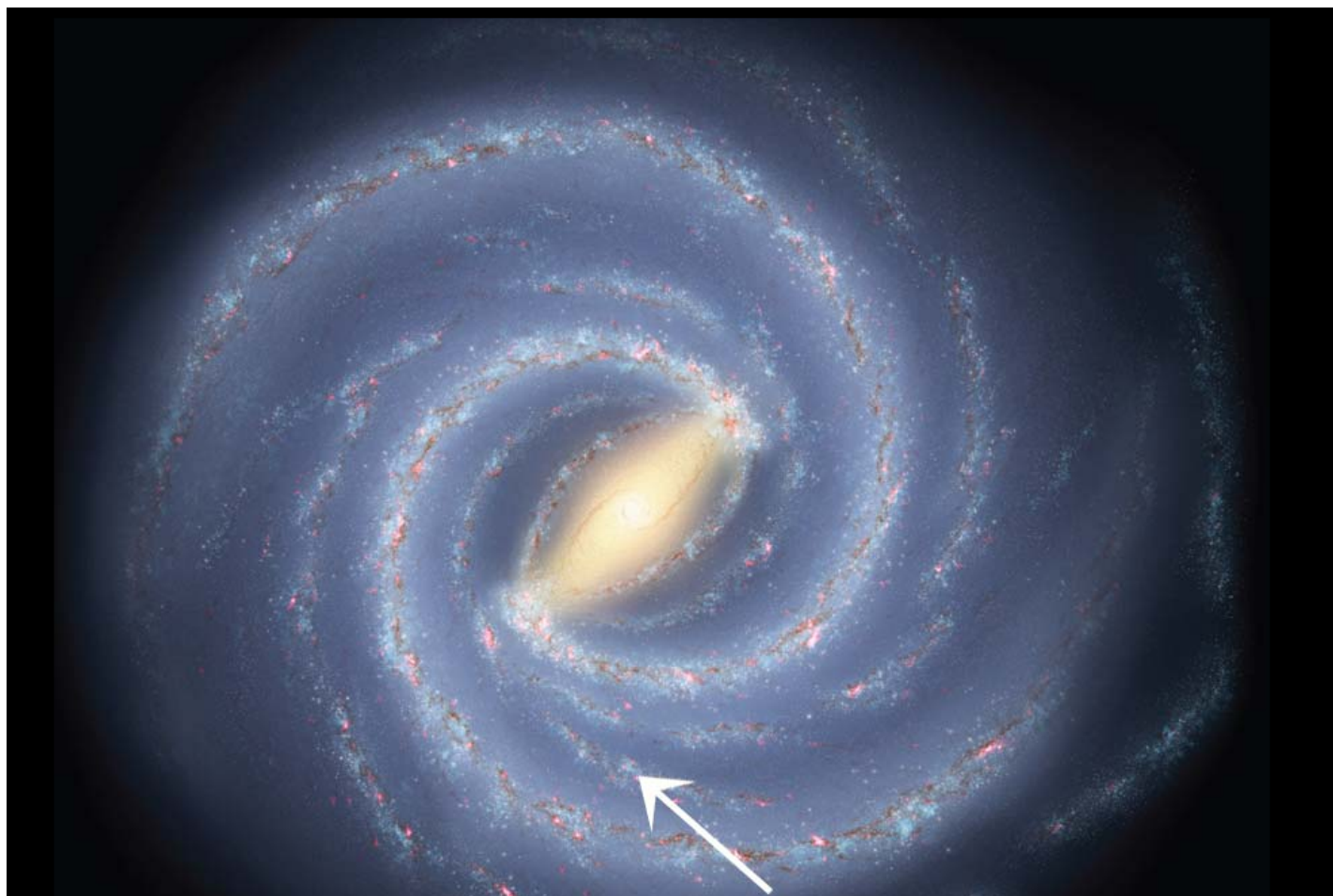


21st Century Education



We are here



ILO First Light Galaxy Imaging



Galaxy Garden Hawai'i



Make Your Own Milky Way Model - Subaru Telescope



2010

Understanding Our Place in the Universe

INTERNATIONAL
LUNAR
OBSERVATORY
ASSOCIATION



Get to Know Our Place in the Universe

Hawai'i Island Galaxy Education Resources:



Mauna Kea / Mauna Kea Visitors Center

Center of international world-class astronomy with 12 observatories, many with their own Galaxy imaging program. Highest point in the Pacific Ocean at 4,205m (13,796 ft). "Mauna a Wakea" is one of the most sacred areas for Native Hawaiians.

Galaxy Garden

The Galaxy Garden is a 100-foot diameter outdoor scale model of the Milky Way, mapped in living plants and flowers and based on current astrophysical data. Located in Honaunau and created by renowned space artist Jon Lomberg.



www.galaxygarden.net



'Imiloa Astronomy Center

'Imiloa is a premier interpretive center for modern astronomy and Hawaiian cultural traditions. It is an interactive museum, planetarium and education center located on Hilo. www.imiloahawaii.org

Native Hawaiian Cultural Practitioners



Kimo Pihana is a renowned Native Hawaiian Cultural Practitioner and Kahuna. He previously served as a ranger for Mauna Kea Support Services on the top of Mauna Kea.



Koa Rice is a cultural practitioner, astronomy educator and hula dancer and helps organizations develop culturally appropriate models for their activities in Hawaii.

Hawaii Island Astronomy Observatories

Subaru, Canada France Hawaii, WM Keck, Gemini North, University of Hawaii, NASA Infrared, UK Infrared, Caltech Submillimeter, James Clerk Maxwell, Submillimeter Array, Very Long Baseline Array, Thirty Meter Telescope



PISCES

Pacific International Space Center for Exploration Systems (PISCES) is an international research and education center dedicated to the development of new technologies needed to sustain life on the Moon and beyond. PISCES is based at the University of Hawai'i Hilo.

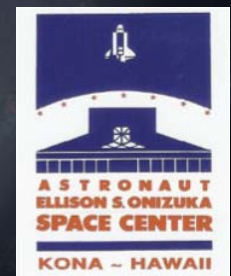
Galaxy Dimensions

- Known as the "Milky Way," a *barred spiral galaxy*
- Number of Stars in the Galaxy: 200,000,000,000 (2×10^{11})
- Total Galaxy Mass: $7.2 \times 10^{11} M_{\text{SUN}}$ or $10^{12} M_{\text{SUN}}$
- Thickness: 50,000 light years
- Diameter: 100,000 light years
- Period for Solar System (sun, earth, etc.) to circle Milky Way: 225,000,000 years
- Supermassive black hole located at the Galaxy Center
- Earth distance to Galaxy Center: 30,000 light years
- One of billions of galaxies in the observable Universe

All figures are estimates

Onizuka Space Center

An educational facility dedicated to Hawaii's first astronaut, Ellison Onizuka. The Center's interactive exhibits and videos tell the history of human space flight, physics and daily life in space. Located at the Kona Airport.



International Lunar Observatory Association

The International Lunar Observatory Association (ILOA) is a Hawaii-based non-profit organization dedicated to expanding human knowledge of the Cosmos through observation from the Moon, via its ILO Precursor, ILO Polar and ILO Human Service missions. Located in Waimea. www.iloa.org

