

GALLERY OF ASTRONOMICAL MARVELS



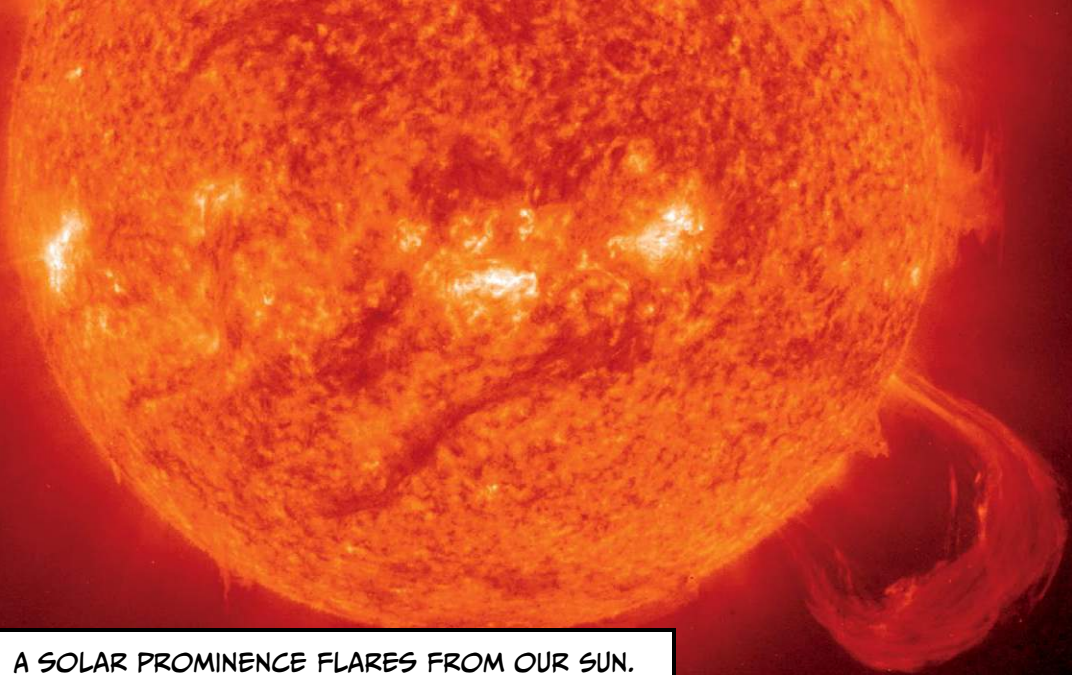
EARTHRISE, AS SEEN BY THE
CREWMEMBERS OF APOLLO 8.

CREDIT: NASA/William Anders

BUZZ ALDRIN WALKS
ON THE MOON.



CREDIT: NASA/Neil Armstrong



A SOLAR PROMINENCE FLARES FROM OUR SUN.
READ MORE ABOUT THE SUN ON PAGE 95.

CREDIT: ESA/NASA/SOHO

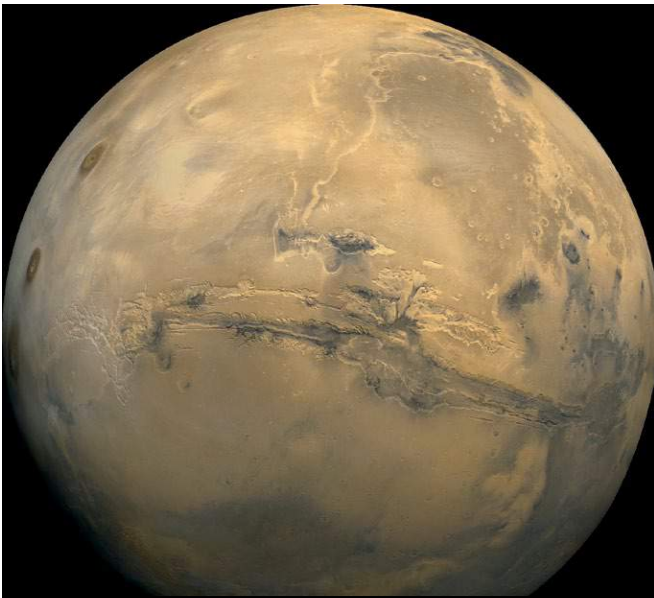


A VIEW OF MERCURY FROM THE *MESSENGER* SPACECRAFT.
READ MORE ABOUT MERCURY ON PAGE 83.

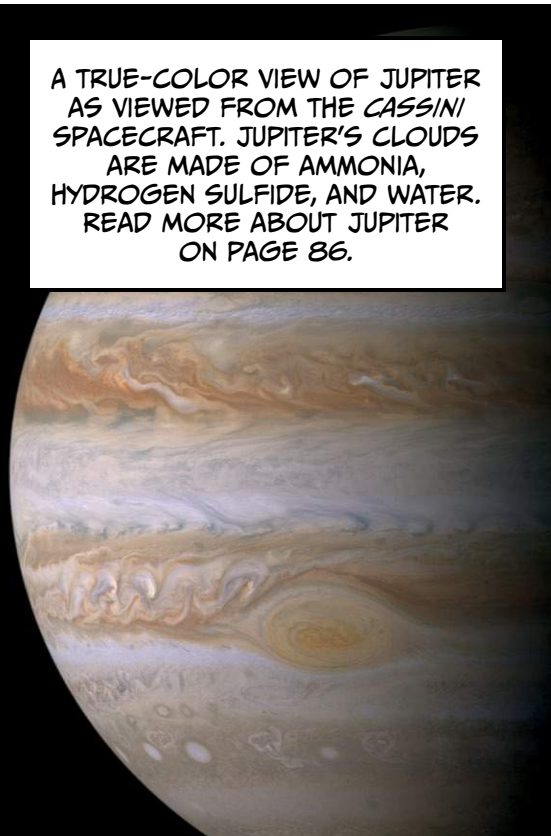
CREDIT: NASA



THIS VIEW OF THE SURFACE OF VENUS WAS GENERATED VIA RADAR AND COLORED TO HIGHLIGHT SURFACE DETAIL. VENUS'S SURFACE IS NOT VISIBLE TO THE NAKED EYE, AS IT IS COVERED IN CLOUDS. READ MORE ABOUT VENUS ON PAGE 84.



A COMPOSITE VIEW OF THE SURFACE OF MARS TAKEN BY THE VIKING SPACECRAFT SHOWS A 2,500-MILE-LONG SCAR CALLED VALLES MARINERIS. READ MORE ABOUT MARS ON PAGE 85.



A TRUE-COLOR VIEW OF JUPITER AS VIEWED FROM THE CASSINI SPACECRAFT. JUPITER'S CLOUDS ARE MADE OF AMMONIA, HYDROGEN SULFIDE, AND WATER. READ MORE ABOUT JUPITER ON PAGE 86.



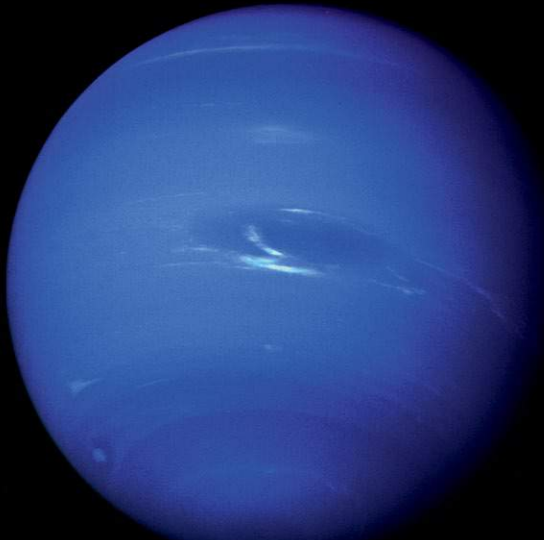
CREDIT: NASA/JPL/Space Science Institute

SATURN'S RINGS ARE VISIBLE IN THIS TRUE-COLOR IMAGE FROM *CASSINI*. READ MORE ABOUT SATURN ON PAGE 87.



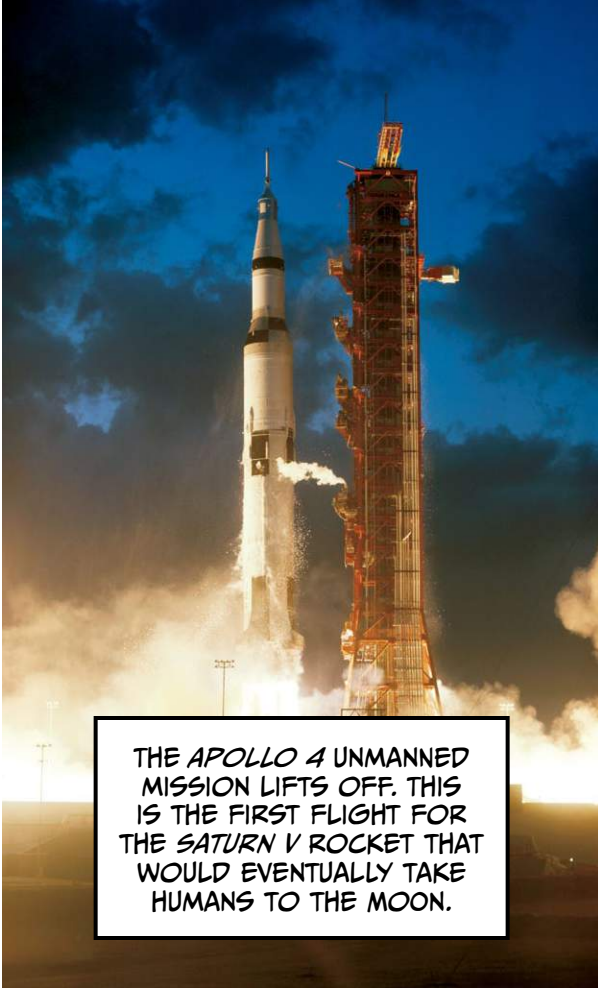
CREDIT: NASA/JPL

THE *VOYAGER 2* SPACECRAFT SHOWED THAT THE SURFACE OF URANUS IS HAZY AND BLUE. READ MORE ABOUT URANUS ON PAGE 88.

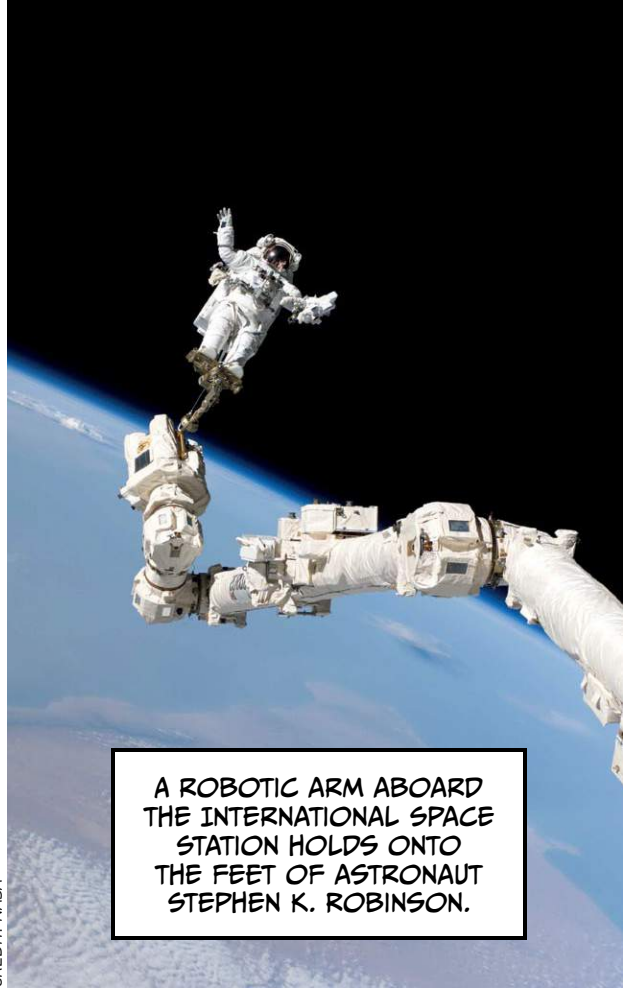


CREDIT: NASA/JPL

VOYAGER 2 ALSO CAPTURED A VIEW OF THE SURFACE OF NEPTUNE, INCLUDING A LARGE STORM THAT APPEARS AS A GREAT DARK SPOT. READ MORE ABOUT NEPTUNE ON PAGE 89.



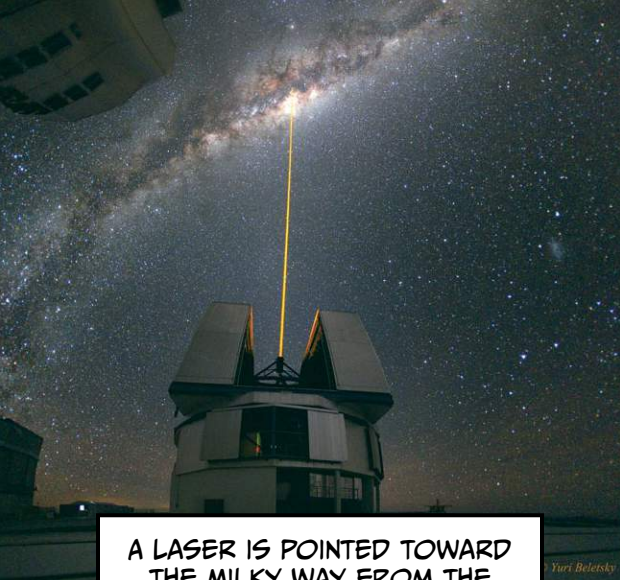
THE APOLLO 4 UNMANNED MISSION LIFTS OFF. THIS IS THE FIRST FLIGHT FOR THE *SATURN V* ROCKET THAT WOULD EVENTUALLY TAKE HUMANS TO THE MOON.



A ROBOTIC ARM ABOARD THE INTERNATIONAL SPACE STATION HOLDS ONTO THE FEET OF ASTRONAUT STEPHEN K. ROBINSON.



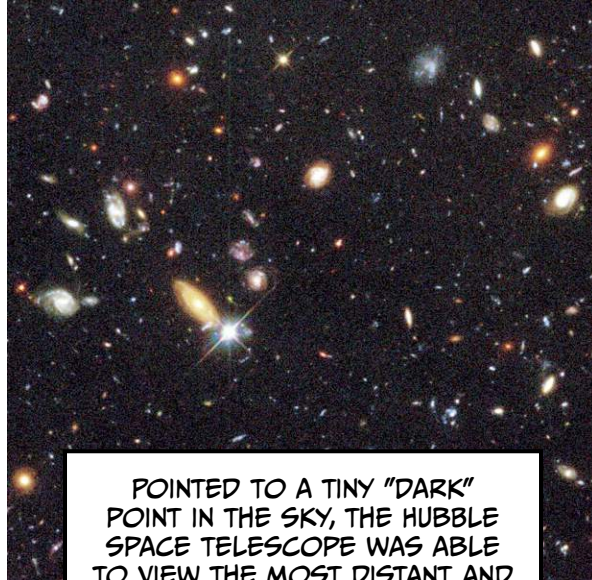
SPACE SHUTTLE *COLUMBIA* BEFORE ITS FIRST LAUNCH



A LASER IS POINTED TOWARD THE MILKY WAY FROM THE VERY LARGE TELESCOPE (VLT).

Yuri Beletsky

CREDIT: ESO/Yuri Beletsky (CC by 3.0)

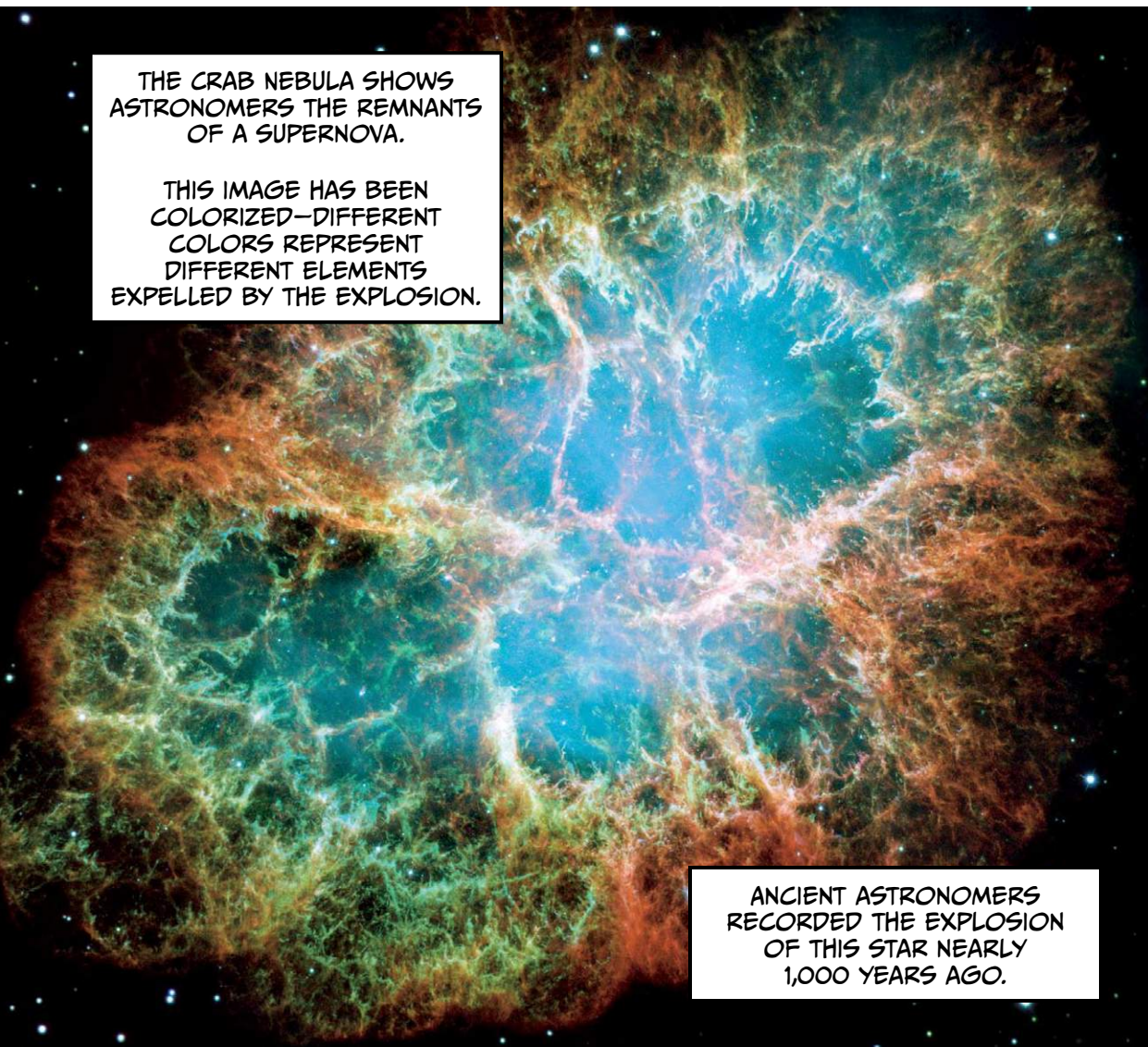


POINTED TO A TINY "DARK" POINT IN THE SKY, THE HUBBLE SPACE TELESCOPE WAS ABLE TO VIEW THE MOST DISTANT AND YOUNGEST GALAXIES EVER SEEN.

CREDIT: R. Williams (STScI), the Hubble Deep Field Team, NASA

THE CRAB NEBULA SHOWS ASTRONOMERS THE REMNANTS OF A SUPERNOVA.

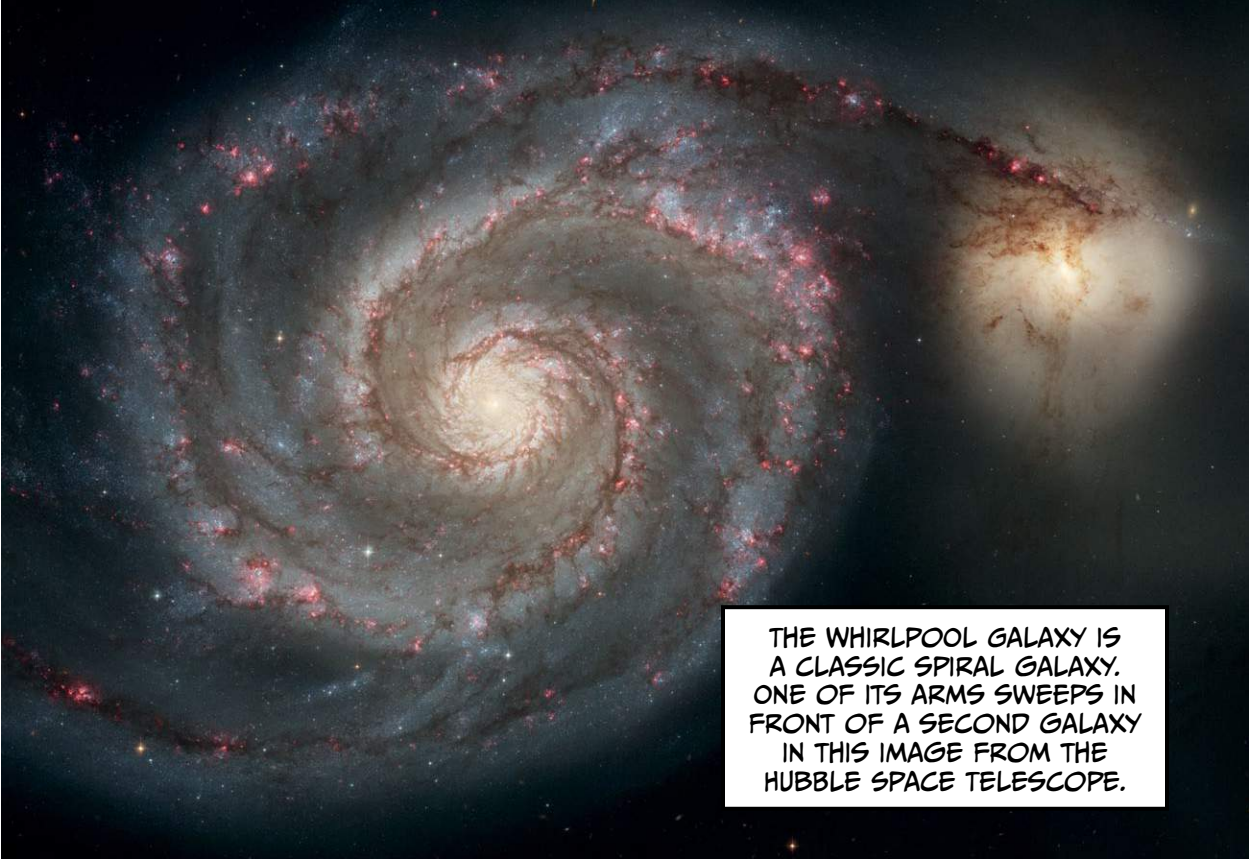
THIS IMAGE HAS BEEN COLORIZED—DIFFERENT COLORS REPRESENT DIFFERENT ELEMENTS EXPELLED BY THE EXPLOSION.



ANCIENT ASTRONOMERS RECORDED THE EXPLOSION OF THIS STAR NEARLY 1,000 YEARS AGO.

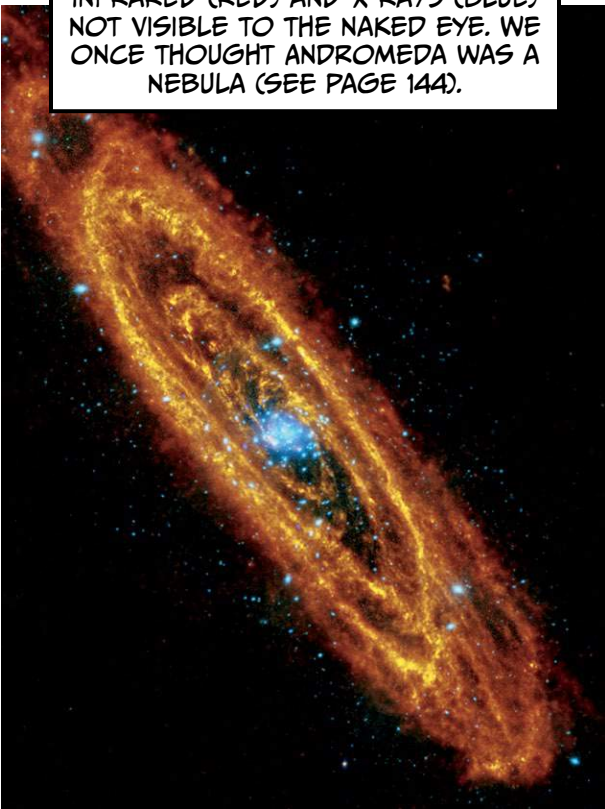
CREDIT: NASA/STScI

CREDIT: S. Beckwith (STScI), ESA, NASA



THE WHIRLPOOL GALAXY IS A CLASSIC SPIRAL GALAXY. ONE OF ITS ARMS SWEEPS IN FRONT OF A SECOND GALAXY IN THIS IMAGE FROM THE HUBBLE SPACE TELESCOPE.

CREDIT: ESA/Herschel/PACS/SPIRE/J. Fritz, U. Gent, X-ray: ESA/XMM Newton/EPIC/W. Pietsch, MPE



THIS IMAGE OF ANDROMEDA, OUR NEIGHBORING GALAXY, SHOWS INFRARED (RED) AND X-RAYS (BLUE) NOT VISIBLE TO THE NAKED EYE. WE ONCE THOUGHT ANDROMEDA WAS A NEBULA (SEE PAGE 144).

CREDIT: NASA/JPL-Caltech/UCLA

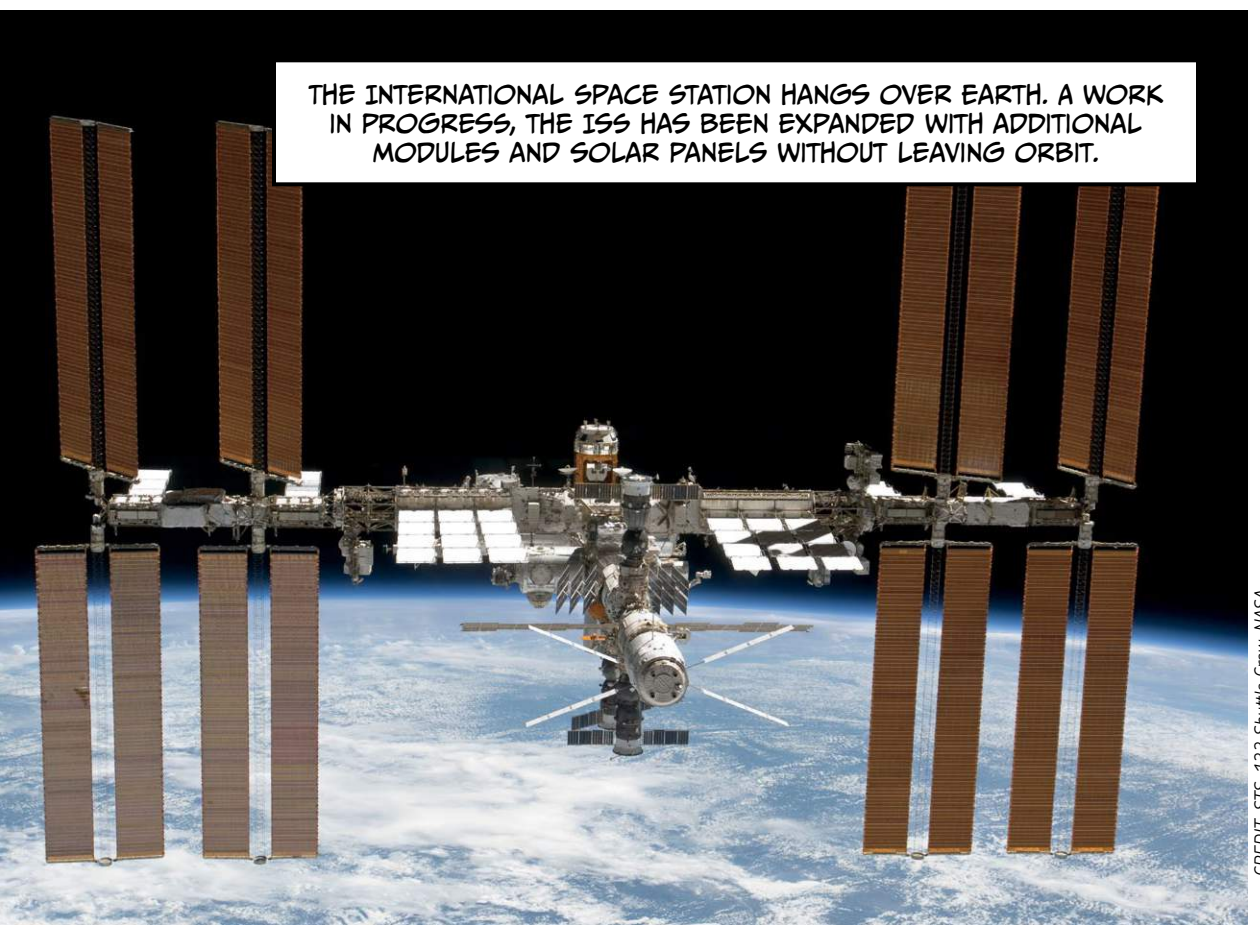


THIS INFRARED IMAGE SHOWS A BRIGHT BLUE STAR HURLING THROUGH A LARGE CLOUD OF INTERSTELLAR DUST AND GAS.



ASTRONAUT TRACY CALDWELL DYSON
LOOKS OUT THE WINDOWS OF THE
INTERNATIONAL SPACE STATION.

CREDIT: NASA/Douglas Wheelock



THE INTERNATIONAL SPACE STATION HANGS OVER EARTH. A WORK
IN PROGRESS, THE ISS HAS BEEN EXPANDED WITH ADDITIONAL
MODULES AND SOLAR PANELS WITHOUT LEAVING ORBIT.

CREDIT: STS-133 Shuttle Crew, NASA