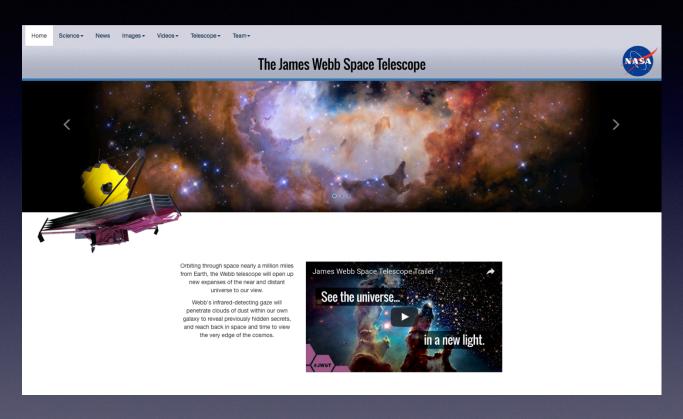
OPO Presentation STUC Meeting

October 2016

JWST Outreach

Webbtelescope.org (public site) is now live: webbtelescope.org

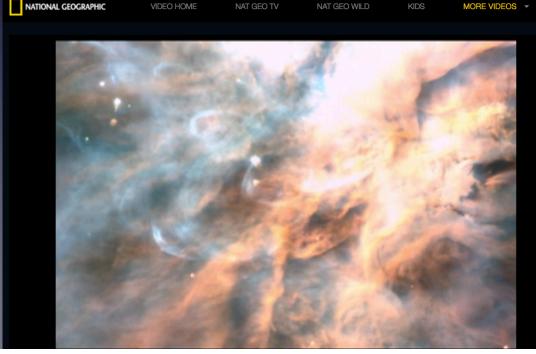


New Minutephysics video "Where do Galaxies Come From?" released, 300,000 views in first 24 hours [June 28]

https://www.youtube.com/watch?v=kif4ON6QOPE



PBS Nova special
"Treasures of the
Earth" includes gold
and JWST mirrors
3 part series will air;
Nov. 2,9 and 16th



Working with
NatGeo program to
update to the 2010
documentary "Hubble's
Amazing Universe" with
JWST and HST content

Outreach Events



Astronomy Festival on the National Mall June 10, 2016



Events at Lassen and Yellowstone



50 Science Fiction writers visit to STScI

USA Science and Engineering Festival [Apr 15-17]







365,000 attendees over 3 days (60,000 students)

Artscape (Baltimore): Theme "Space: Explore What's Out There"

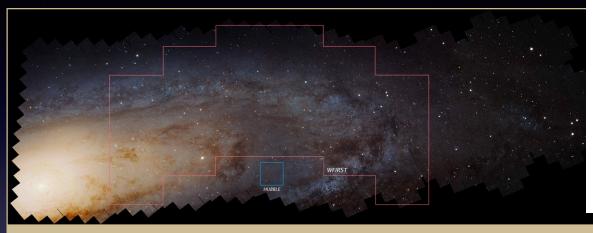
The Festival attracted 1/2 Million visitors







WFIRST









The Wide Field Infrared Survey Telescope (WFIRST) will be NASA's next large space astrophysics observatory after the James Webb Space Telescope (WST). Both missions are built on the legacy of the Hubble Space Telescope. Whereas .WST offens superior sensitivity over Hubble, WFIRST will provide a panoramic field of view that is 100x wider than Hubble, leading to the first wide-field maps of the

This image shows an incredible high-resolution view of our nearest Galactic neighbor, the Andromeda Sprial Galaxy, as collection of millions of individual starts. The image was necessity obtained through of the biggest Hubble programs ever attempted, the Parichromatic Hubble Andromeda Treasury program (Pt. J. Disaction). In daily observable relies central region and sprial disk of the against, astronomers took 400 distinct pointings with Hubble (pilus equare) and connected them together to build the widefeld mount. The image is now the gold started for indeedinating the detailed make up of glassiss in the program of the p The red cuttine shows the commons footpoint of WFRET apperimposed on the Habble mosale. It would also just the WFRET priming to come the entire rejected by Habble in this mosale, are would be presented by the WFRET priming to come the entire rejected by Habble in this mosale, resolution will enable a very architosis science program. This includes a multi-promped approach to resolution will enable a very architosis science program. This includes an unital-promped approach to measure the habble of date energy, to complement the Kepler measure by discovering the census of measure the habble of date energy, to complement the Kepler measure by discovering the census of in stellar and glastics actively keyline. WFRST will also have a high performance consequiph for directly inalign grant planted around nearly start.

The WFIRST mission is led by NASA's Goddard Space Flight Center and is aimed for faunch in the mid 2020s. Godderd is working on the mission with the left Propultion Laboratory, the Space Telescope Science Institute, the Infrared Processing and Analysis Center, and several industrial partners. WFIRST: Expanding Our View

PHAT/WFIRST Field-of-View display GSFC Building 29 (Clean Room)

- Animations & Videos
- Brochures
- Exhibits
- Public Events



Our Place in Space

Our place in Space is a travelling exhibition designed to get you thinking about where humanity fits in the grand scheme of our Universe. Astronomers and artists will present their own interpretations of where we are, where we belong, what our past might have been and what our future might look like, by using Hubble images, artworks and installations. Combining different perspectives in the exhibition by bringing together art and science gives us a unique, and more complete, view of the Universe we live in and the research, both in science and the arts, being done to understand it.

https://www.spacetelescope.org/projects/ourplaceinspace/

Exhibition locations

Venice, Italy February to April 2017

Garching, Germany November 2017 to February 2018

SMD Education Restructuring

- Desired Outcome: *To increase the overall coherence of the SMD science education program* leading to more effective, sustainable, and efficient utilization of SMD science discoveries and learning experiences and to meet overall SMD science education objectives.
- Fundamental to achieving this outcome is to *enable* NASA scientists and engineers to engage more effectively with learners of all ages.

SMD Education: Status

- FY16 appropriation provides \$37M for SMD Education.
- 27 proposals selected. Awards made and Year 1 funding provided.
- Collaboration across CAN awards encouraged.
- SMD holding monthly telecons with awardees.
- Baseline Review meeting in November will cover program reports, priorities for upcoming year, and leveraging efforts.

NASA's Universe of Learning



An Integrated Astrophysics STEM Learning and Literacy Program





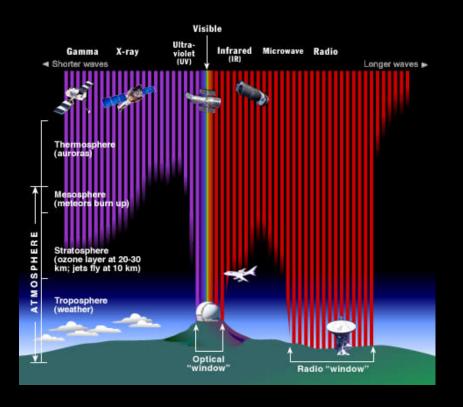


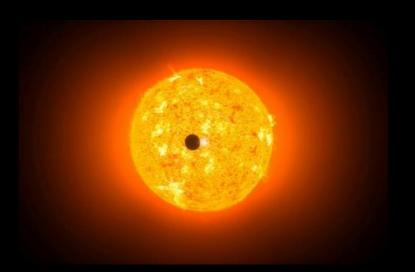




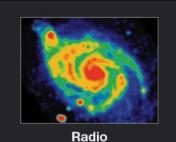


Connecting to Fundamental STEM Concepts





Light and Color Size and Scale Models Process of Science











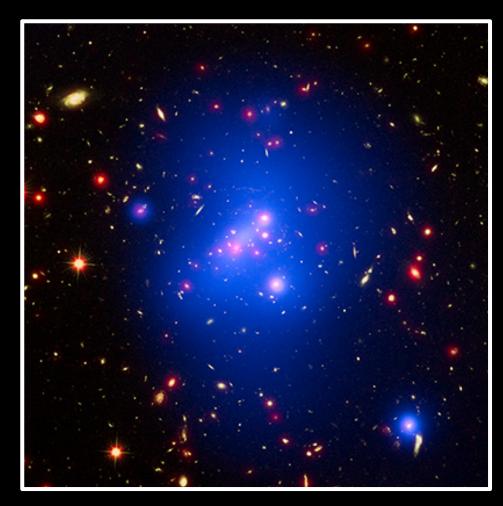
Visible

Ultraviolet

X-Ray

12

Integrating NASA Astrophysics into Audience-Driven Programs



NASA Astrophysics Science, Technology, and Subject Matter Experts

Data Tools & Participatory Experiences

Multimedia and Immersive Experiences

Exhibits and Community Programs

Professional Development



Audience Needs

Universe of Learning: Status

- Subcontracts established with Co-Investigators and external evaluators.
- Regular leadership team meetings established.
- Initial evaluation plan and literature review submitted to SMD.
- Integrated cross-institution work plan and work groups in place.
- Initial collaborations with other CAN awardees identified.
- Needs assessment surveys in progress (partnership, subject matter experts, informal education community).
- Development and piloting of initial program activities underway.



Chandra Pencil Code



Immersive Experiences





Engaging the Museum Community