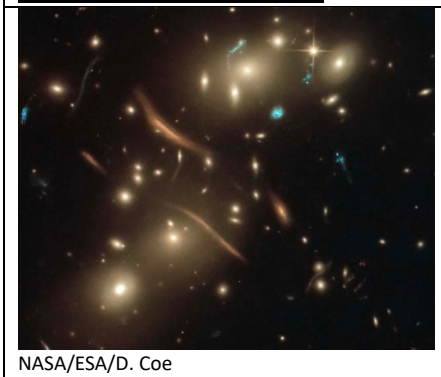
NASA's Universe of Learning Science Briefing: October 2024

The resources in this list pertain to the presentation given on October 3, 2024, titled "Gravity: from Waves to Lenses."

NASA's Universe of Learning (UoL) is a program which integrates NASA's Astrophysics Science Mission Directorate programs, and advances STEM learning and literacy by creating and delivering a unified suite of education products, programs, and professional development that spans the full spectrum of NASA Astrophysics. NASA's Universe of Learning is partnering with the Museum and Informal Education Alliance to provide professional development briefings for the informal science education community. These briefings provide current NASA Astrophysics themes, content, and resources to the informal community. These curated lists present resources related to the briefing topics. To find the briefings, you can go here: http://universe-of-learning.org/science_briefing.

Featured Resources



NASA/ESA/D. Coe

UoL Resources About Gravity

Video about how the gravity of a galaxy cluster can magnify the far universe.

Ask the Astronomers Live: Gravity: The Ultimate Magnifying Glass

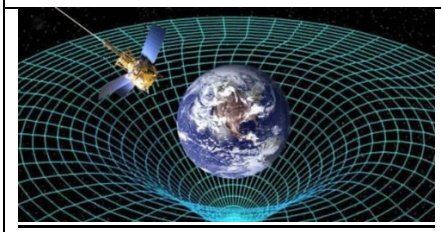
NASA's ViewSpace video collections about aspects of gravity, gravitational lensing, and gravitational waves.

Gravity

Gravitational Lensing

Gravitational Lens

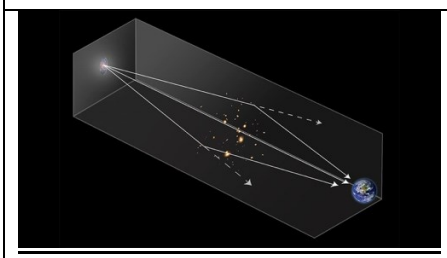
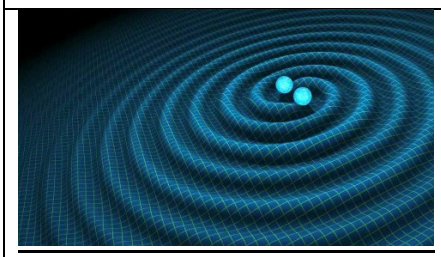
Gravitational Waves



NASA

NASA Resources About Gravity

A variety of web pages featuring video and narrative explanations, concepts, and illustrations, and related activities and exercises.

	Space Place: What is Gravity? What is Gravity? Gravitational Force Explore: Gravity: It's What Keeps Us Together Kids Get Down With Gravity Explore: Gravity and Mechanics
 NASA/ESA/A. Feild, F. Summers (STScI)	NASA Resources About Gravitational Lensing A variety of web pages featuring video and narrative explanations, concepts and illustrations, and what gravitational lensing can tell us about the distant universe and things like dark matter. Hubble Science: Gravitational Lensing, Nature's Boost NASA Explains Gravitational Lensing Gravitational Lensing Diagram Explore: Gravitational Lenses Explore: Hubble Spies Galaxy through Cosmic Lens Explore: Shining a Light on Dark Matter
 R. Hurt/Caltech-JPL	NASA Resources About Gravitational Waves A variety of web pages featuring videos, podcasts, and narrative explanations, concepts and illustrations, including modeling activities. Space Place: What is a Gravitational Wave? Imagine the Universe: Gravitational Waves LIGO: What are Gravitational Waves? Gravitational Waves: Ripples in Space-Time

	Teachable Moments: Gravitational Waves Detected for the First Time Detecting Gravitational Waves Dropping In With Gravitational Waves Explore: The Invisible World of Gravitational Waves Explore: Teachable Moments: Modeling Gravitational Waves
 NASA/ESA/J. Lotz and the HFF Team (STScI)	Other Gravity-Related Resources A variety of web pages from other sources providing information, explanations and links to a wide array of resources, videos, articles, lesson plans and activities. Science Trek: Gravity Science Lessons that Rock: Gravity Lesson Plans Science Learning Hub: Gravity PBS Learning Media: Gravitational Force PBS Learning Media: Gravity and Falling Objects Gravity Probe B: Testing Einstein's Universe STEM Learning