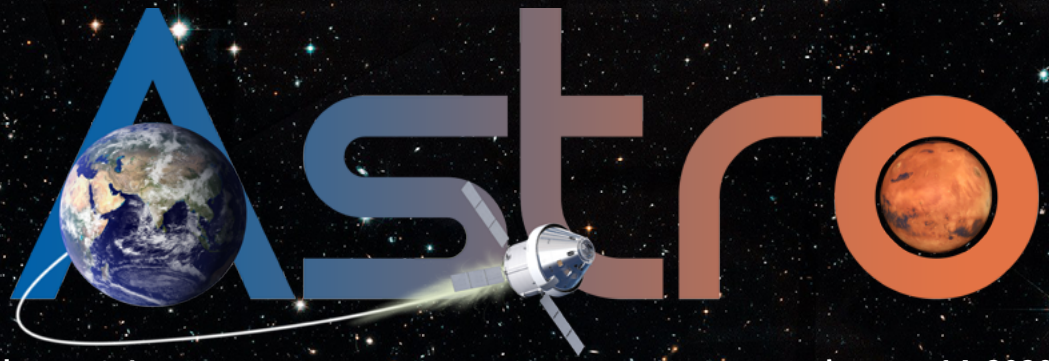


“Creative thinking inspires ideas. Ideas inspire change.” Barbara Januszkiewicz

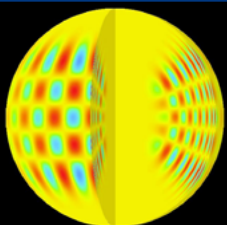


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The Interiors of Stars

The interiors of stars are largely mysterious regions because they are so difficult to observe directly. Our lack of understanding about the physical processes there, like rotation and the mixing of hot gas, introduces considerable ambiguity about how stars shine and how they evolve. Stellar oscillations, detected through brightness fluctuations, offer one way to probe these subsurface regions. In the Sun, these vibrations are due to pressure waves generated by turbulence in its upper layers (the layers dominated by convective gas motions). Helioseismology is the name given to the study of these oscillations in the Sun, and astroseismology is the term used for other stars.

Phys.org



NASA's Newest Astronauts Ready for Space Station, Moon, and Mars Missions

NASA welcomed 11 new astronauts to its ranks Friday, increasing the number of those eligible for spaceflight assignments that will expand humanity's horizons in space for generations to come. The new astronauts successfully completed more than two years of required basic training and are the first to graduate since the agency announced its Artemis program.

technology.org

An Earth-Size Planet in the Habitable Zone?



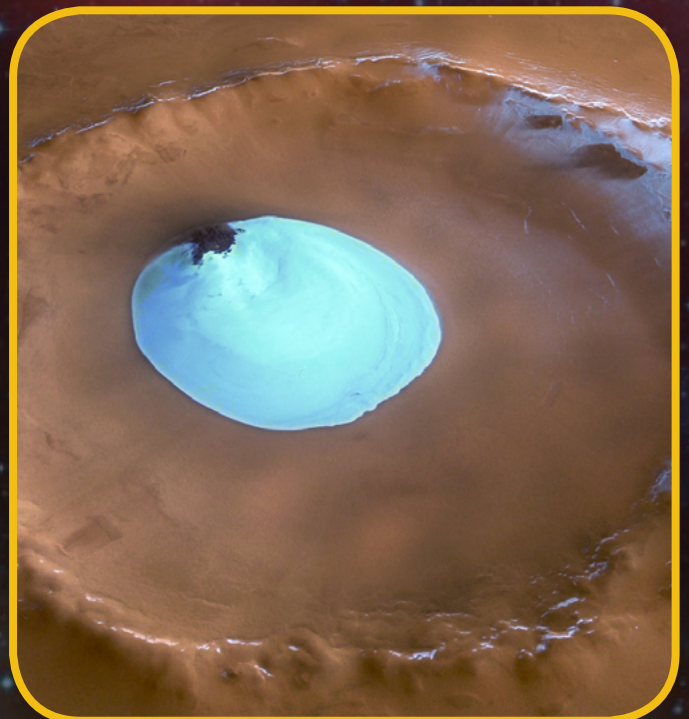
TOI 700 d is the newest member of that elite club. The planet was discovered courtesy of NASA's Transiting Exoplanet Survey Satellite, or TESS, as one of three worlds in a distant solar system. Unlike its neighbors — and the vast majority of planets scientists have identified so far — it seems to be about the same size as Earth and to orbit its star at a distance that would allow water to remain liquid on its surface.

Space.com

Mars Loses Water to Space During Warm, Stormy Seasons

Scientists surveyed the data for links between temperature and water distribution and found the Martian atmosphere became supersaturated during the warmest portions of its orbit. Their findings suggest water is more likely to rise into the upper atmosphere and escape to space when Mars is warmer and wetter.

MarsDaily.com



Binary Star V Sagittae Expected to Light up The Night Sky in 2083



By the end of the 21st century, stargazers may witness a “new star” seem to appear in the constellation Sagitta the Arrow. Located roughly 7,800 light-years away, the two stars, collectively called V Sagittae, are spiraling closer and closer together. And as they twirl around each other, the larger star is dumping material onto its smaller, white dwarf companion. Ultimately, the two will collide and coalesce, creating a powerful burst of light that astronomers estimate will make V Sagittae the brightest star in the night sky for about a month.

Astronomy.com

New Hubble View of Gigantic Galaxy

The year 2020 marks the 30th anniversary of the launch of the Hubble Space Telescope. On January 6, to kickstart the anniversary year, SpaceTelescope.org released a glorious new image of UGC 2885, one of the largest spiral galaxies in the local universe. Our Milky Way is a spiral, too, but this galaxy is one of the largest known in the local universe, 2 1/2 times wider than our Milky Way with 10 times as many stars. It's 232 million light-years away, in the direction of the northern constellation Perseus the Hero.





Global Friendship Through Space Education

Schools In Action!

Dear followers,

The photographs, which you can see below, are the ones that were taken during the projects and presentations of the students that participated in PSSP (Partner School Science Program) and FEP (Future Explorers Program). We are happy and proud to share the projects that were created with brilliant ideas.



1, 2- Gymnasium No:3 of Volgograd (FEP), RUSSIA 3- Erkan Ulu Schools (FEP), Istanbul/TURKEY
4- Bornova ITK Campus(FEP), Izmir/TURKEY 5-İsmail Kaymak Schools(FEP), Çanakkale/TURKEY



Astronomy Picture of the Day

NGC 602 and Beyond

Image Credit & Copyright: X-ray: Chandra: NASA/CXC/Univ.Potsdam/L.Oskinova et al;

Optical: Hubble: NASA/STScI; Infrared: Spitzer: NASA/JPL-Caltech

Near the outskirts of the Small Magellanic Cloud, a satellite galaxy some 200 thousand light-years distant, lies 5 million year young star cluster NGC 602. Surrounded by natal gas and dust, NGC 602 is featured in this stunning Hubble image of the region, augmented by images in the X-ray by Chandra, and in the infrared by Spitzer. Fantastic ridges and swept back shapes strongly suggest that energetic radiation and shock waves from NGC 602's massive young stars have eroded the dusty material and triggered a progression of star formation moving away from the cluster's center. At the estimated distance of the Small Magellanic Cloud, the Picture spans about 200 light-years, but a tantalizing assortment of background galaxies are also visible in this sharp multi-colored view. The background galaxies are hundreds of millions of light-years or more beyond NGC 602.

apod.nasa.gov



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