Volume 13, Issue 15

September 15, 2020





Global Friendship Through Space Education

CONTENTS

Gobekli Tepe: The World's First	
Astronomical Observatory?	1
What Are Comets?	1
Virgin Galactic Will Launch	
Suborbital Spaceflight	2
Hints of Life on Venus	2
New Small Satellite Mission	ł
to Rendezvous With Binary	
Asteroids	3
Germany Wins the ERC 2020	
Tournament	3



What Are Comets?

Comets are loosely packed balls of ice and dust orbiting our sun, that sometimes become visible in Earth's skies. A comet's tail may stretch across millions of miles of space. NASA Solar System exploration page is also a good place to look for information about comets. It explains that there are likely billions of comets orbiting our sun in the Kuiper Belt and even more distant Oort Cloud. Those of us who watch the skies are, of course, most interested in comets when they appear as visitors in our skies. Since comets are most active when they're near the sun, we tend to see comets shortly after sunset or before sunrise.

Gobekli Tepe: The World's First **Astronomical Observatory?**

Earth's Northern Hemisphere was covered in enormous Ice Age glaciers when a group of hunter-gatherers in southern Turkey began constructing the world's first known temple. The site, called Gobekli Tepe, was built roughly 12,000 years ago, with some parts appearing to be even older. Gobekli Tepe's design and age have captured the public's imagination for decades. It's been the subject of widespread, and often breathless, press coverage and documentaries, as well as countless conspiracy theories, from aliens to fantastical claims about ancient, technologically advanced civilizations. Some scientists, primarily those not connected to the core group excavating the site, have speculated that Gobekli Tepe was actually an astronomical observatory, or perhaps even the biblical Garden of Eden.

Newsletter

Virgin Galactic Will Launch Another Suborbital Spaceflight



The space tourism company's latest SpaceShipTwo vehicle, known as VSS Unity, has made two crewed test flights to suborbital space, first in December 2018 and then again in February 2019.

Virgin Galactic is now preparing for its next suborbital test flight, which could launch as soon as Oct. 22, CNBC reported, citing documents filed last week with the U.S. Federal Communications Commission.

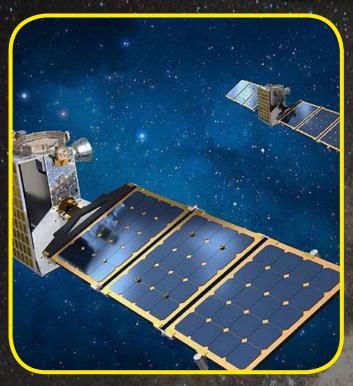
Hints of Life on Venus: Scientists Detect Phosphine Molecules in High Cloud Decks

An international team of astronomers, led by Professor Jane Greaves of Cardiff University, today announced the discovery of a rare molecule—phosphine—in the clouds of Venus. On Earth, this gas is only made industrially, or by microbes that thrive in oxygen-free environments.

The team believes their discovery is significant because they can rule out many alternative ways to make phosphine, but they acknowledge that confirming the presence of "life" needs a lot more work.



New Small Satellite Mission to Rendezvous With Binary Asteroids



The University of Colorado Boulder and Lockheed Martin will soon lead a new space mission to capture the first-ever closeup look at a mysterious class of solar system objects: binary asteroids.

Newsletter

These bodies are pairs of asteroids that orbit around each other in space, much like the Earth and Moon. In a project review on Sept. 3, NASA gave the official go-ahead to the Janus mission, named after the twofaced Roman god.

SpaceDaily.com

Germany Wins the ERC 2020 Tournament

The winner of the sixth edition of the international ERC Mars Rover competition is the German team ERIG e.V. Hot on their heels were members of RoverOva from the Czech Republic, who ended up second. The third place was granted to both DJS Antariksh from India and Columbian Robocol. It is the first time in the history of ERC where two teams tied for a place on the podium.

The ERC's mission is to encourage the highest quality research in Europe through competitive funding and to support investigator-driven frontier research across all fields, on the basis of scientific excellence.









How to Protect Ourselves?

Avoid close contact with people who are sick.



Cover your cough or sneeze with a tissue, then throw the tissue in the trash.

Clean and disinfect frequently touched objects and surfaces.

Avoid touching your eyes, nose, and mouth.

Stay home when you are sick, except to get medical care.

Wash your hands often with soap and water for at least 20 seconds.





Copyright: cdc.org





ISAS, JAXA, Akatsuki

Astronomy Picture of the Day

Biomarker Phosphine Discovered in the Atmosphere of Venus Image Credit & Copyright: ISAS, JAXA, Akatsuki; Processing: Meli thev

Could there be life floating in the atmosphere of Venus? Although Earth's planetary neighbor has a surface considered too extreme for any known lifeform, Venus' upper atmosphere may be sufficiently mild for tiny airborne microbes. This usually disfavored prospect took an unexpected upturn yesterday with the announcement of the discovery of Venusian phosphine. The chemical phosphine (PH₃) is a considered a biomarker because it seems so hard to create from routine chemical processes thought to occur on or around a rocky world such as Venus -- but it is known to be created by microbial life on Earth. The featured image of Venus and its thick clouds was taken in two bands of ultraviolet light by the Venus-orbing Akatsuki, a Japanese robotic satellite that has been orbiting the cloud-shrouded world since 2015. The phosphine finding, if confirmed, may set off renewed interest in searching for other indications of life floating high in the atmosphere of our Solar System's second planet out from the Sun.



Space Camp Turkey, Aegean Free Zone 35410 Gaziemir, Izmir / Turkey Phone : +90 232 252 35 00 Fax : +90 232 252 36 00 Email: info@spacecampturkey.com

© 2018 - SPACE CAMP TURKEY / ALL RIGHTS RESERVED - An ESBAS Enterprise



