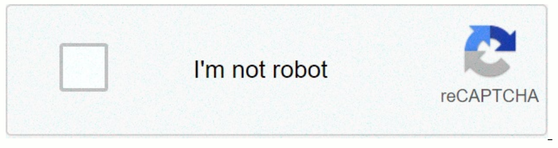

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Nasa latest news asteroid 2020

Humanity's artistic expression is too beautiful to be confined to our home planet. To this end, NASA is putting an art gallery on 101955 Bennu. No, that's not the bizarre name of a Brooklyn warehouse. It's an asteroid. As part of its We the Explorers campaign, the U.S. space agency is taking digital art submissions to put on a chip that will travel inside a space probe and touch down on the surface of Bennu. The spacecraft, OSIRIS-REx, will launch in September and take two years to get there. In 2019, it will take a sample from the asteroid, becoming the first space probe in history to do so. During their short stay at Bennu, all life forms can take in the traveling art exhibition, if they wish. When the spacecraft returns home in 2023, it will throw the sample capsule, allowing it to fall back down to Earth for scientists to study. The remainder of the spacecraft, including the Digital Art Gallery, will move in orbit around the Sun where it will remain until the end of time or until aliens find it—whichever comes first. Space exploration is an in itself creative activity, said Dante Lauretta, principal investigator for OSIRIS-REx, in a press release from NASA. We invite the world to join us on this great adventure by placing its artwork on the OSIRIS-REx spacecraft, where it will stay in space for millennia. The theme of the space gallery is what it means to be an explorer. Artists around the world can send their paintings, poems, songs or videos to OSIRIS-REx Twitter or Instagram accounts. The deadline for filing is March 20.It may seem foolish, or even pointless, to send an art gallery into space, just because. But the initiative gets many more people interested in NASA and its mission, and OSIRIS-REx sounds like an important one. The researchers hope that the sample from Bennu will contain organic molecules such as amino acids, which can tell us a lot about how life begins and the likelihood that life is elsewhere in the solar system. Bennu, which is 492 feet in diameter, passed within just 35,400 kilometers (22,000 miles) of Earth in 2013—that's less than a tenth of the distance from here to the moon. Astronomers believe there is a high probability that it will collide with Earth in 2182. Still, the high probability of an asteroid is still, generally speaking, a low probability. Right now there is about a 1 in 2,700 chance that Bennu will meet us in the 22nd century. Potential armageddon aside, this is just the latest initiative in a long line of NASA sending your stuff to space. NASA famously sent a number of images, sounds and songs—from a variety of languages and cultures—with the Voyager spacecraft in 1977. In 2010, the space agency sent thousands of faces aboard the last two flights of the space shuttle. And in 2014, it sent thousands of names of a microchip aboard the orion spaceprobe's first flight. NASA sent a copy of the script for Mars on that flight. Such is the world we live in these days that it Aeronautics and the Space Agency feel the need to issue an official statement on how we will all not die in a shaking collision with a giant asteroid next month. But that's how the Internet-powered rumour mill spits, so here we are. First, the false rumor: A massive asteroid will hit our planet, apparently near Puerto Rico, sometime between September 15 and 28, 2015 that will cause tremendous destruction on the U.S. Atlantic and Gulf coasts, as well as Mexico, Central America and South America. There is no scientific basis – not a shrerated evidence – that an asteroid or any other celestial object will affect Earth on these dates, Paul Chodas, director of NASA's Near-Earth Object office at the Jet Propulsion Laboratory in Pasadena, California, said in the statement. If there was any object big enough to do that kind of destruction in September, we would have seen some of it by now. The actual truth is that NASA has been monitoring these things, courtesy of the Near-Earth Object office at the Jet Propulsion Laboratory in Pasadena, California, and every known item on the list has less than a 0.01 percent chance of influencing within the next 100 years. The agency tracks and records asteroids and comets passing within 30 miles of Earth using both ground- and space-based telescopes, it said in the statement, and that there are no known credible threats so far —just the continuous and harmless whims of meteroids, small asteroids that burn up in the atmosphere. Moreover, NASA normally knows exactly when something like this would happen if it were true, and wouldn't provide a ridiculous two-week window of uncertainty, given that right now we can calculate the exact date of Halley's comet return on July 28, 2061 down to the minute. Remember all the latest doomsday predictions, such as all the near miss asteroids that were anything but; the presumed end of the Mayan calendar on 21 December 2012; and of course Harold Camping and his total BS tour from back in 2011 predict the end of the world. Again, there is no existing evidence that an asteroid or any other celestial object is on an orbit that will affect Earth, chodas said. In fact, not a single one of the known objects has any credible chance of hitting our planet in the next century. I have a feeling ExtremeTech readers weren't particularly worried about this, but for the only case there are facts. A schematic of how asteroids are distributed throughout the solar system. NASA Asteroids are rocky pieces of solar system material found in orbit around the Sun in almost the entire solar system. Most of them are located in the Asteroid Belt, which is an area of the solar system that stretches between the orbits of Mars and Jupiter. They occupy a huge amount of space out there, and if you were to travel through the Asteroid Belt, it seems pretty empty to you. That's because the asteroids are scattered, not crowded together in swarms you often see in movies or some pieces of space art). Asteroids also orbit in Earth's closest space. They are called Near-Earth Objects. Some asteroids also orbit near and beyond Jupiter as well. Others orbit the Sun along the same path as a planet, and they are called Trojan asteroids. Asteroids are in a class of objects called small solar system bodies (SSBs). Other SSBs include comets, and a group of worldlets found in the outer solar system called Trans-Neptunian Objects (or TNOs). These include worlds like Pluto, although Pluto and many TNOS are not necessarily asteroids. Back when asteroids were first discovered in the early 1800s—Ceres was the first to be found. It is now considered a dwarf planet. But at the time, astronomers had an idea that a planet was missing from the solar system. One theory was that it existed between Mars and Jupiter and somehow broke apart to form the Asteroid Belt. That story isn't even remotely what happened, but it also turns out that the Asteroid Belt is raised by materials similar to objects that formed other planets. IIt just never got it together to actually make a planet. Another idea is that the asteroids are the rocky remnants of the formation of the solar system. That idea is partly correct. It is true that they were formed in the early solar nebula, just as pieces of comets did. But over billions of years they have changed through internal warming, effects, surface melting, bombardment of small micrometeorites and radiation weather. They have also migrated into the solar system, settling mostly in the Asteroid Belt and near the orbit of Jupiter. Smaller collections are also found in the inner solar system, and some shed debris that eventually falls to Earth like meteors. Only four large objects in the belt contain half the mass of the entire belt. These are dwarf planetceres and asteroids Vesta, Pallas, and Hygeia Asteroids come in several flavors: carbon-containing C-types (containing carbon), silicate (S-types containing silicon), and metal-rich (or M-types). There are likely millions of asteroids, which range in size from small patches of rock to worldlets more than 100 kilometers (about 62 miles) across. They are grouped into families, whose members show the same types of physical properties and chemical composition. Some of the compositions are about as compositions of planets as Earth. This huge chemical difference between the types of asteroids is a big clue that a planet (which broke apart) never existed in the Asteroid Belt. Instead, it looks more and more like the belt region became the gathering place for planetesimals left over from the formation of the other planets, and through gravitational influences, made their way to the belt. An artist's concept that shows how families of asteroids are created, by collision. This process and others change asteroids through warming and impact processes. NASA/JPL-CalTech The early solar nebula was a cloud of dust, rock, gases provided for the seeds of the planets. Astronomers have seen similar disks of material around other stars as well. These seeds grew from pieces of dust to eventually form The Earth, and other terrestrial-type planets like Venus, Mars and Mercury, and the rocky interiors of gas giants. Those seeds—often referred to as planetesimals—clustered together to form protoplanets, which then grew to become planets. It is possible if conditions had been different in the solar system, a planet MIGHT has formed where the Asteroid Belt is today—but the nearby giant planet Jupiter and its formation may have caused the existing planetesimals to collide too violently with each other to accrete into a world. As infant Jupiter traveled from its formation area closer to the sun, its gravitational influence sent them spread out. Many gathered in the Asteroid Belt, others —called Near-Earth Objects—are still there. Sometimes they cross earth's orbit but usually pose no threat to us. But there are many of these small objects out there, and it is quite possible that one can wander too close to Earth and possibly crash into our planet. Groups of astronomers are keeping an eye on near-Earth asteroids, and there is a concerted effort to find and predict orbits for those who may come close to us. There is also a lot of interest in the asteroid belt, and the dawn spacecraft's main mission has been studying the dwarf planet Ceres, which was once considered an asteroid. It previously visited the asteroid Vesta and returned valuable information about that object. Astronomers want to know more about these ancient rocks dating back to the earliest eras of solar system history, and learn about the events and processes that have changed them in the meantime. Time.