

Best of Last Week: New class of black holes, traffic maps for the internet, and 3-D printed skin

November 4 2019, by Bob Yirka

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It was another good week for space exploration as a group with members from the University of Connecticut, Texas A&M University, the University of Central Florida, the Naval Research Laboratory, and the

Air Force Research Laboratory conducted [a study that shed light on the conditions that trigger supernovae explosions](#)—they were able to demonstrate the process of detonation formation on some of the largest supercomputers in the U.S. Also, a team with members from the U.S., Spain, Denmark and Sweden announced that [they might have discovered a whole new class of black holes](#)—a class smaller than the smallest-known black holes in the universe. And an international team of researchers announced that [worldwide observations confirmed a nearby 'lensing' exoplanet](#)—data from telescopes around the world confirmed the rare event.

In technology news, a team at Pennsylvania State University announced that they had developed [a lithium-ion battery design that can charge an electric vehicle in 10 minutes](#)—by charging the battery to an elevated temperature and then discharging it at cooler temperatures. Also, a collaboration between MIT and several institutions in Chile resulted in the development of [a system that provides cooling with no electricity](#)—by taking advantage of radiative cooling. And a team at the University of New Mexico announced that they had developed [a deep-learning approach to coordinate defensive escort teams](#) to provide enhanced security for people or goods. Also, a team at MIT created [a supercomputer application that analyzes web traffic across the entire internet](#) and shows what it looks like on any given day.

In other news, a team at Rensselaer Polytechnic Institute made headlines when they announced that [living skin can now be 3-D-printed with blood vessels](#)—a significant step toward skin grafts that are more natural. And a team with members from several institutions in China and the U.S. announced that they had collected [2-million-year-old ice samples that provide a snapshot of Earth's greenhouse gas history](#).

And finally, if you are one of the millions of [pregnant women](#) around the world, you may want to take a look at work done by a team led by

Xiaobing Wang, of the Johns Hopkins University Bloomberg School of Public Health—they found evidence that suggested [taking acetaminophen during pregnancy could be linked to a higher risk of ADHD and autism](#) in babies.

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