

Best of Last Week-New form of light, possible cure for viral infections and the science behind a fulfilling single life

August 8 2016, by Bob Yirka

Artistic image of light trapped on the surface of a nanoparticle topological insulator. Credit: Vincenzo Giannini

(ScienceX)—It was another good week for physics as a team at Imperial College London unveiled research that suggested [light could exist in a](#)

[previously unknown form](#)—by binding it with a single electron. They suggest it might be used to send packages of information through circuits as a faster replacement for electrons. A team working at the University of Maryland described how [programmable ions may set the stage for general-purpose quantum computers](#) as part of their announcement of the first fully programmable and reconfigurable quantum computer module. And a team at the University of New Mexico announced that they had reached [the lowest temperature ever recorded in solids using laser cooling](#) by employing a technique they called "optical cooling." Also, a team of researchers from Japan, Italy and the U.S. described [simulations that showed a single photon could simultaneously excite two atoms](#)—possibly paving the way for use in a quantum system.

In space news, an international team of researchers reported that they had found [a giant stellar void in the Milky Way](#), suggesting some major revisions of our understanding of our home galaxy may be in order. A trio of researchers with the Harvard-Smithsonian Center for Astrophysics and the University of Oxford asked, [is Earthly life premature from a cosmic perspective?](#) They wondered if it might be because our planet is believed to be just 4.5 billion years old.

In other news, a team of engineers at the University of Maryland found that [the newly discovered blue whirl fire tornado burns cleaner and thus has reduced emissions](#)—they evolve from traditional yellow fire whirls and might lead to reduced carbon emissions if used in industrial applications. Also, an international team of researchers announced that they had taken [a big step towards finding a cure for lifelong viral infections](#)—they discovered that certain T cells are capable of finding and attacking hidden infected cells. And a team of researchers from China and the U.S. announced that they had [found the first evidence of a legendary China flood and that it may rewrite history](#)—known as China's Great Flood, the disaster, which occurred approximately 4,000 years ago, had a major impact on China's history.

And finally, if you are someone who prefers a solo existence, you might be interested in a study done by psychologist Bella DePaulo who claimed to have revealed [the science behind a fulfilling single life](#).

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