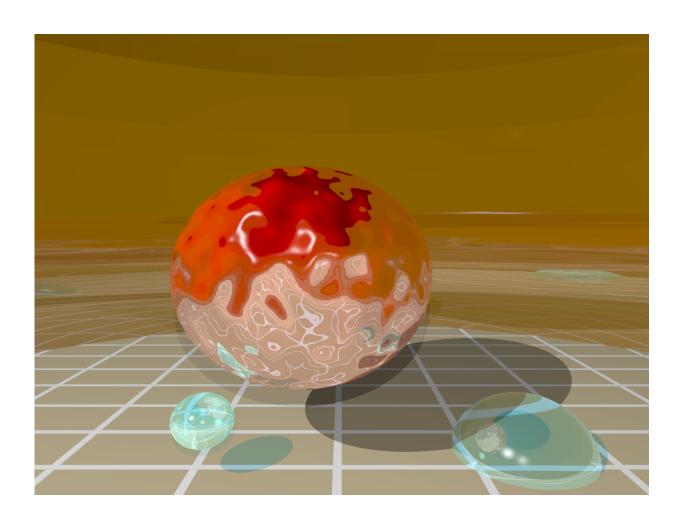
Best of Last Week-New form of light, possible cure for viral infections and the science behind a fulfilling single life

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.

© 2016 ScienceX

Citation: Best of Last Week-New form of light, possible cure for viral infections and the science behind a fulfilling single life (2016, August 8) retrieved 11 July 2025 from https://sciencex.com/news/2016-08-week-new-viral-infections-science-fulfilling.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.