

# Best of Last Week: A loose thread in string theory, e-cigarettes harm brain stem, and diet's role in obesity pandemic

July 8 2019, by Bob Yirka

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Credit: University of Colorado at Boulder

It was a good week for physics as a team at the University of Chicago [combined light and matter to make particles with new behaviors](#)—the particles, which are part atom and part light, were found to also interact

with each other quite strongly. Also, a team with members from Iowa State University, the University of Wisconsin and the University of Alabama [used light waves to accelerate supercurrents](#), enabling ultrafast quantum computing—and allowing light-induced superconductivity without an energy gap. And an associate professor of physics at the University of Colorado, Boulder, found [a loose thread in a string theory puzzle](#)—perhaps moving one step closer to solving a string theory puzzle 20 years in the making. Also, a team with members from the U.S. Department of Energy's Princeton Plasma Physics Laboratory and General Atomics found evidence suggesting [that tiny granules could bring clean and abundant fusion power to Earth](#).

It was also a good week for technology research, as a team at the U.S. Department of Energy's Lawrence Berkeley National Laboratory found that [with little training, machine-learning algorithms can uncover hidden scientific knowledge](#) by scanning the text of millions of papers. Also, a team at the University of Colorado, Boulder, reported on their experiments involving [artificial gravity breaking free from science fiction](#)—by spinning volunteers on a metal platform. And a team with members from Princeton University and MIT described experiments that showed [a dramatic increase in solar cell output](#) by knocking out two electrons with a single photon instead of the usual one. Also, a group led by a team at Stanford University announced that they had developed [a new, more user-friendly language for programming supercomputers](#) called Regent. It allows researchers to run projects without having to become experts in C++. And a team at the University of California, Riverside, found that [electronic cigarettes damage the brain stem](#) by producing a stress response in neural stem cells.

And finally, if you are one of the millions of [obese people](#) in the world today, and you have been blaming your genes for it, you might want to have a look at research conducted by a team led by Maria Brandkvist at the Norwegian University of Science and Technology—they found that

while genetics does play a role, [the obesity pandemic is mostly due to diet](#).

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