

# **Best of Last Week: Controlled transport of light, 'walking inside of cells,' and one COVID-19 vaccine found to be safe**

October 19 2020, by Bob Yirka

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Credit: Petr Kratochvil/public domain

It was another good week for physics as a combined team from Beihang University and Johannes Gutenberg-Universität Mainz successfully carried out [controlled transport of stored light](#) by holding it in a cloud of

cold atoms—they carried it a distance of 1.2 millimeters and found doing so had little impact on the stored light. Also, a team at the University of Rochester [synthesized a room temperature superconducting material](#) by compressing molecular solids with hydrogen at high pressures—the first time that a superconducting material has been observed at room temperatures. And a team at the Institute of Industrial Science at the University of Tokyo found that [a tetrahedra may explain water's uniqueness](#).

In technology news, an international team of researchers found that [simpler, smaller neural networks could be used to solve certain tasks better than conventional AI systems](#). Also, a combined team from the University of Cambridge and Lume VR Ltd. created [new virtual reality software that allows scientists to "walk" inside of cells](#). And a team at the University of Southern California created [a virtual agent that can negotiate with humans](#) in three-round negotiation tasks. Also, Google engineer Andy Nguyen reported via Twitter that he had found [a Bluetooth flaw in the Linux kernel that allowed nearby hackers to execute code](#).

In other news, a team with members from Italy, Brazil and the U.K. found evidence during a modeling study that suggested [climate change likely drove early human species to extinction](#)—and also found some clues to explain why Homo sapiens were the only human species to survive. Also, a team from Regeneron Pharmaceuticals, Inc., working with the Texas Biomedical Research Institute, reported that [the experimental COVID-19 antibody cocktail treatment given to President Trump relieves symptoms in macaques and hamsters](#).

And finally, if you are like billions around the world anxiously awaiting a vaccine against COVID-19 but are also worried about whether it will be safe, you might want to check out the results of work done by a team with members affiliated with multiple institutions in China—they

reported preliminary results showing that [the COVID-19 vaccine candidate based on inactivated SARS-CoV-2 virus is safe.](#)

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Citation: Best of Last Week: Controlled transport of light, 'walking inside of cells,' and one COVID-19 vaccine found to be safe (2020, October 19) retrieved 2 May 2024 from <https://sciencex.com/news/2020-10-week-cells-covid-vaccine-safe.html>

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