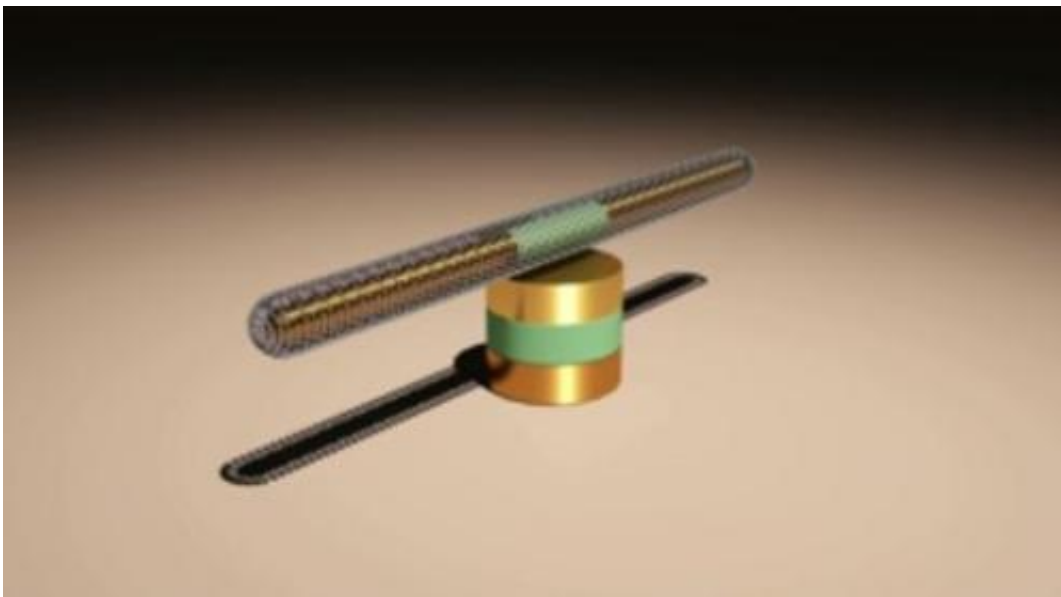


Best of Last Week – Onset of mass investigated, wormhole time travel possibility and net encryption cracked in two hours

May 26 2014, by Bob Yirka



(Phys.org) —Last week saw many interesting developments in several areas of science. In one effort, a team of [physicists investigated onset of effective mass](#)—in looking into what happens to effective mass when an external force is applied very abruptly, they found it was characterized by bare mass. Also making headlines this past week: [Google engineers opened the gates to the Quantum Computing Playground](#). It's a web page that allows prospective quantum computer programmers to hone their

skills on a simulated 22 qubit machine. And a team in China devised a system that allows for building complicated integrated circuits by putting FETs on carbon nanotubes—their latest effort led to [forty-six transistors constructed on six CNTs—the most complicated device of its kind to date](#). It had 46 FETs on six CNTs. Meanwhile in Texas, [engineers built the world's smallest, fastest nanomotor](#)—it's the longest running, fastest and smallest synthetic motor ever made.

There was news in space science as well, as a [physicist suggested that some types of wormholes may stay open long enough to send a photon through](#)—if true, that would mean it should be theoretically possible to send messages back and forth in time—assuming everything else with the wormhole works out, too. Also, [scientists confirmed that a stellar behemoth self-destructed in a Type IIb supernova](#)—the first ever direct confirmation of such an event.

Back here on Earth, it seems [people more likely to choose a spouse with similar DNA](#), which should make dating websites more reliable, if they can get people to submit a sample, of course.

In the biological sciences, a pair of researchers in the Netherlands has witnessed [animals in the wild were found to use a running wheel if given the choice](#)—apparently mice and other small animals really like running in place. [Also, brain imaging has revealed clues about chronic fatigue syndrome](#)—evidence that helps prove that the condition is real and is perhaps treatable.

There was also a bit of practical news as researchers at BYU announced [new super waterproof surfaces cause water to bounce like a ball](#). Superhydrophobic surfaces are useful in a wide variety of applications, from water repellent clothes to airplane wings that resist icing. And finally, some might find it amusing that [researchers cracked an unassailable encryption algorithm in two hours](#)—so much for it being the key to the

Internet's future security system.

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