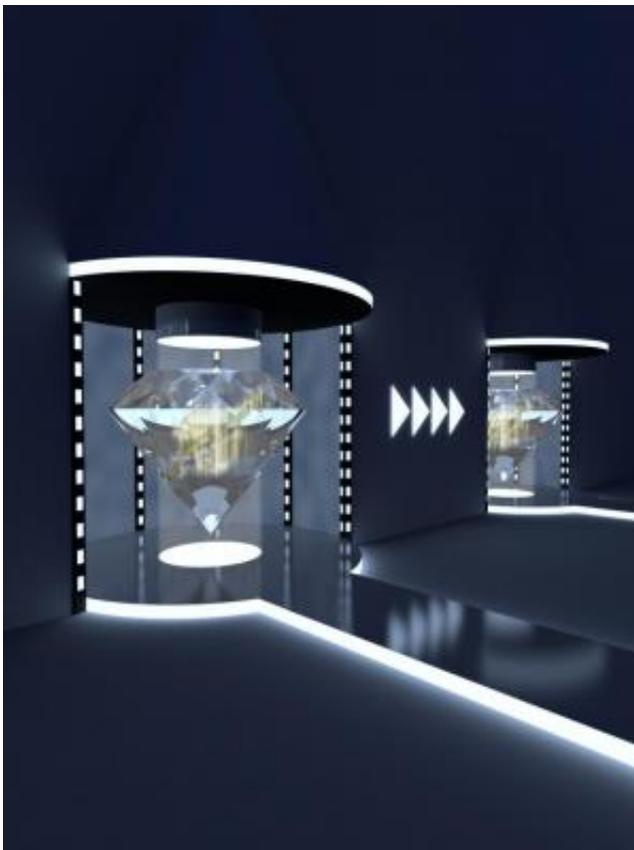


## Best of Last Week – quantum information accurately transferred, better wind turbines and study of porn's impact on brain

June 2 2014, by Bob Yirka

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Artistic impression of quantum teleportation of a spin state between two distant diamonds.

(Phys.org) —It's been a remarkable week for physics work—first a

[research team claims to have accurately 'teleported' quantum information ten feet](#), and report that they did so with 100 percent accuracy. If the claims turn out to be true, this could mark the beginning of real-world quantum computers or networks. Equally exciting, researchers at Lawrence Berkeley National Laboratory's have found that [combining lasers could shrink particle accelerators from kilometers to meters](#). Imagine the cost savings—such a development would allow more scientists access to such research, perhaps opening the door to a flood of new discoveries. And imagine also, a [space-based experiment that could test gravity's effects on quantum entanglement](#)—and in so doing, make inroads toward creating a unifying theory between the theory of relativity and quantum theory.

It's been a pretty busy week for technology development also: A [Dutch company launched new-generation urban wind turbines](#)—they're a lot quieter than conventional turbines and take up much less space. And, a team at MIT has announced a [new breed of solar cells: Quantum-dot photovoltaics set a new record for efficiency in such devices](#)—another step toward a new generation of cells that last a lot longer and can be manufactured under ordinary temperatures.

In the biological sciences, a [study shows environmental influences may cause autism in some cases](#)—a finding that could help explain why it is that babies born to older mothers have an increased risk of developing the disorder. Another team is reporting a [breakthrough that shows how DNA is 'edited' to correct genetic diseases](#). It's a step forward in understanding how enzymes impact genes to prevent [genetic diseases](#), and maybe leading to a way to improve the process.

In otherworldly news, a [pair of researchers suggest black holes at center of galaxies might instead be wormholes](#). It may sound a bit far-fetched, but a new addition to a telescope in Chili could prove them right or wrong, in just a couple of years. Also, researchers working with NASA's

Swift satellite report a [cosmic explosion spotted in neighboring galaxy](#). They're not sure what happened, but suspect it was two neutrons stars colliding.

And finally, food for thought: [Does porn affect the brain? Scientists urge more study](#). Preliminary research indicates heavy users have less grey matter. But was porn the cause, or was it a condition that led to the behavior? More research will have to be done to find out. In the meantime, the team at Max Planck Institute isn't making any recommendations.

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