

"Physicists at The University of Texas at Austin have built a tabletop particle accelerator that can generate energies and speeds previously reached only by major facilities that are hundreds of meters long and cost hundreds of millions of dollars to build.

"We have accelerated about **half a billion electrons to 2 gigaelectronvolts over a distance of about 1 inch**," said Mike Downer, professor of physics in the College of Natural Sciences. "Until now that degree of energy and focus has required a conventional accelerator that stretches more than the length of two football fields. **It's a downsizing of a factor of approximately 10,000.**"

The results, which were published this week in *Nature Communications*, mark a major milestone in the advance toward the day when multi-gigaelectronvolt (GeV) laser plasma accelerators are standard equipment in research laboratories around the world."----Phys.org

Read more at: <http://phys.org/news/2013-06-particle-tabletop-chapter-science.html>

Nature Communication paper:

<http://www.nature.com/ncomms/2013/130611/ncomms2988/full/ncomms2988.html>