



Physics Seminar



Friday, 3:30 pm March 2nd, 2012

Global Positioning System (GPS)

Joe Gasteiger

In 1916 Albert Einstein published his theory on general relativity and one result that has come from it is GPS. GPS stands for global positioning system and was originally designed by the US military in the 1970s as a navigation system. A fleet of satellites orbit around the Earth and send radio signals from its position to the GPS receiver. By trilateration, a GPS receiver is able to determine its own location anywhere in the world. However, a consequence of Einstein's theory of general relativity is that time goes at a different rate in space than it does on the ground. So scientists must account for this and correct the time on the satellites by sending signals back to the satellite. This seminar will dive into all of these concepts and more!

Battery Technology

Brendan Bandy

Since the 18th century and the discovery of electrical properties, batteries have played an increasingly large role in our everyday life. Some we need to replace, while some we recharge for another use. Regardless of a battery's purpose, the technology behind it continues to grow. This Friday, I will briefly discuss the history of battery technologies that have helped us create and use the 'toys' we have today. I will also discuss the rapid growth of updated technologies as well as which may be the most promising. This includes present day studies and experiments. Please join me in this journey of batteries and the possibilities they possess.

Location: Ross 0220 (Ground level of Ross Hall)

(Refreshments will be served at 3:20pm.)

Physics/EPS/NHS/UNC

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