Physics researchers are looking to the smallest of particles to try to answer some big questions about the universe, from why matter has mass, to whether or not string theory can truly explain the way the universe works.

Join guest host Joe Palca in this hour for a conversation about high energy physics. We'll talk with researchers using the Tevatron particle accelerator at Fermilab, a scientist at CERN looking forward to the startup of the Large Hadron Collider there later this year, and a scientist charged with helping to design the next generation of high energy physics experiments in the form of the International Linear Collider.

Plus, last week China successfully tested an anti-satellite weapon, destroying one of the country's own weather satellites. We'll talk about how the weapon works, and what the test means for space-based weaponry. There currently is no treaty that governs use of weapons in space.

Call in with your questions and comments at 1-800-989-8255 (3-4 Eastern). Teachers, find more information about using Science Friday as a classroom resource in the Kids' Connection.

Guests:
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Books/Articles Discussed:

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This segment produced by Charles Bergquist