

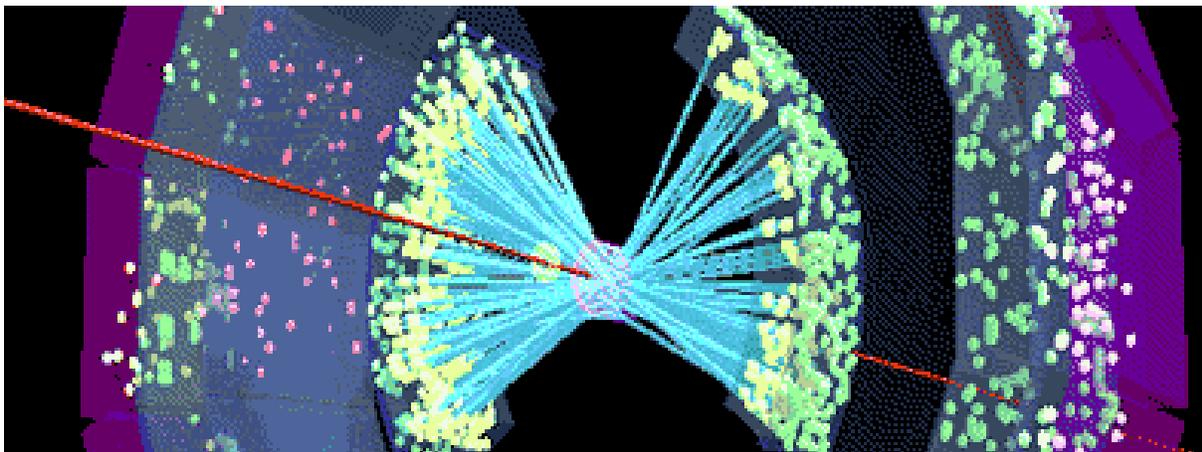
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Small Business Incubator

- The Laboratory, in partnership with Stony Brook University and the Town of Riverhead, will be establishing an incubator for entrepreneurial businesses with a focus on energy, environment, and agriculture.
- The incubator will provide physical space, management and technical assistance, access to Lab and University facilities, and a shared think-tank setting for its tenants.
- The incubator will be located in a new, specially designed building on the former Grumman Calverton site. Temporary facilities on the Laboratory site are planned to be available to qualifying businesses as early as this September.
- The Environmental Business Association of New York State is working closely with the Lab to establish a statewide network of related incubators that will form the core of a program to create jobs throughout the region.

RHIC Resumes Operation with First Full-Energy Collisions



An event display at the PHENIX experiment showing particles emerging from collisions and striking a variety of sub-detectors. PHENIX is one of the four RHIC experiments.

- Scientists have taken their search for an elusive form of matter to a new level by bringing the Relativistic Heavy Ion Collider (RHIC) up to full collision energy.
- All four detectors at the 2.4 mile-circumference, two-ringed particle accelerator are now recording these full-energy collisions, which are expected to produce 100 times more data than collisions during RHIC's first run last year.
- The result will be a clearer picture of what happens when gold ions slam together at nearly the speed of light, and a closer glimpse at the basic structure of matter.

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Long-Life Rechargeable Batteries

If you're tired of cell phones and laptops that quickly lose their charge, or worse, their ability to be recharged, help may be on the way.

- Brookhaven scientists have developed a new metal alloy that could greatly improve the performance of rechargeable batteries for portable electronic devices and electric and hybrid cars.
- The new alloy is inexpensive and relatively environmentally benign along with having a good resistance to corrosion.
- The Laboratory team was recently awarded a U.S. patent for its work on the alloy.

R&D 100 Award for a New Technology

- The Laboratory, in collaboration with Caithness Operating Company, Nevada, won a 2001 R&D 100 Award for developing a technology to recover commercial-quality silica from geothermal brine, a byproduct of geothermal energy production.
- Retrieving this valuable product from brine, which is generally disposed of as waste, lowers energy production costs.



BNL Chemist Mow Lin, who helped invent a new silica recovery process.

Unusual Electrical Properties

- Laboratory scientists are studying a mysterious material that may lead to significant advances in the miniaturization of electronics.
- The material is unusual in that it has an extremely high dielectric constant, a property that determines its ability to become electrically polarized. The higher the dielectric constant, the more charge you can store, and the smaller you can make electronic circuits.
- The work may lead to applications using the material to store electrical charge in high-performance capacitors and offer insight into how charges behave on the nanoscale - on the order of billionths of a meter.

Upcoming Events Open to the Public

- **Summer Sunday Tours, Sundays through August 26, 10 a.m. to 3:00 p.m.** Fun for all ages. Featuring the Whiz Bang Science Show, exciting interactive exhibits, demonstrations, the Camp Upton Historical Collection, and tours of the Lab's scientific facilities. No reservations needed. Free.
August 5 – Fire House
August 12 – National Synchrotron Light Source
August 19 – Medical Department
August 26 – Atmospheric Sciences
- **The Daedalus Quartet, August 22, noon, Berkner Hall:** The Daedalus Quartet is an exciting new string quartet formed in the summer of 2000. The group is quickly making a name for itself in the chamber music world and has performed in recitals in New Jersey, Long Island, and at Columbia University. Free.