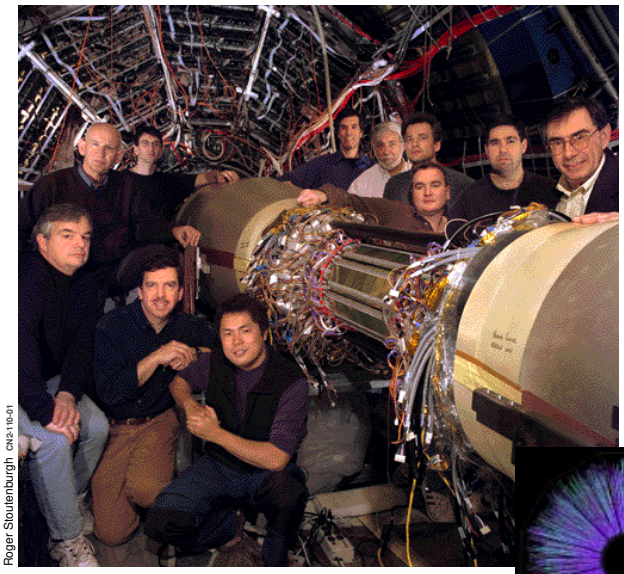
STAR Detector Upgrade Allows Scientists to Look Closer at RHIC Collisions



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Pictured (clockwise from front, center) are members of STAR's silicon vertex tracker (SVT) team: Jun Takahashi, University of Sao Paulo, Brazil; Phil Kuczewski, Physics Department; Rolf Beuttenmuller, Instrumentation Division; Veljko Radeka, Instrumentation; Robert Wilson, Ohio State University; Robert Soja, Physics; Lead Project Engineer Bill Leonhardt, Physics; Project Leader Rene Bellwied, Wayne State University, MI; David Lynn, Physics; Don Pinelli, Instrumentation; and Deputy Associate Laboratory Director for High-Energy and Nuclear Physics Thomas Ludlam.

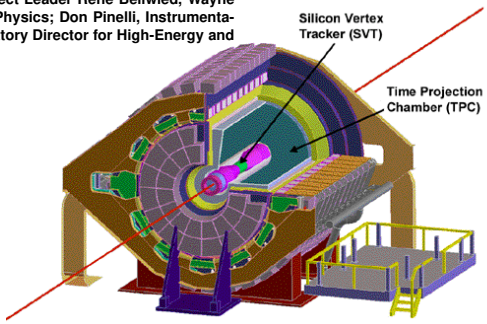
On Saturday, February 17, a silicon vertex tracker (SVT) was installed into the STAR detector at RHIC. This upgrade — which was the culmination of eight years of research, development, and design by a team of more than 50 people — will allow physicists to collect data at a much closer proximity to the point of collision than was possible before the upgrade.

Compared to the time projection chamber (TPC) portion of the detector, which is located approximately 50 centimeters from the interaction region, the three silicon layers of the SVT reside, respectively at 5, 10, and 15 centimeters from where the gold-gold collisions are occurring. This close proximity allows for the detection of charged particles that usually decay before reaching the TPC.

According to SVT project leader Rene Bellwied, Wayne State University, "The installation of the SVT will allow for the detection of particles with short lifetimes, such as cascade and omega particles."

Silicon drift detection — a new semiconductor technology that was developed in the mid-1980s by BNL physicist Pavel Rehak — was employed in the design of the SVT, allowing for a thirty-fold increase in resolution compared to the TPC.

Bellwied also adds, "a portion of the 'dark hole' in the center of previous STAR images will be filled with some wonderful tracks in future STAR images."



BERA Elections 3/26-30

The BERA nominating committee has selected the following slate of candidates to run for the 2001 BERA Executive Board:

Susan Cataldo ..... Medical
Charles Gardner ..... C-A
Jo Ann Reed ..... Cont. & Proc.
Peter Pohlot ..... ES

March 26-30, all eligible employees of BNL, DOE, and other permanent, on-site employees may cast ballots to elect two of the four candidates to serve on the BERA Board.

More information on the candidates and the election process will be published in subsequent editions of the Bulletin.

BERA Spring Fling

The annual BERA Spring Fling will be held on Friday, March 30, at the Rock Hill Country Club in Manorville at 6 p.m. There will be a D.J., a cash bar, and a buffet dinner served from 7 to 8:30 p.m. Tickets cost $15 each and can be purchased by contacting: Andrea Dehler, Ext. 3347; John McCaffrey, Ext. 2075; Louie Nieves, Ext. 4897; or Laurie Pearl, Ext. 5520.

Spirit Dinner Cruise

Join BERA on Tuesday, July 3, for an Independence Day sail around Manhattan on a luxury yacht that will cruise past the Statue of Liberty, Ellis Island, and other fabulous Manhattan landmarks. Tickets include round-trip bus transportation, live music and entertainment, and a buffet dinner. The bus will depart from the Brookhaven center at 4 p.m.

Tickets are being sold first-come, first-served for $75 per person at the BERA Sales Office. For more information, contact Andrea Dehler, Ext. 3347; Rosalie Piccione, Ext. 3160; or M. Kay Dellimore, Ext. 2873.

L.I. Ducks Tickets

Four tickets are available for each game of the Long Island Ducks 2001 baseball season. These tickets will be sold on Tuesday, April 3, at 8 a.m. in the BERA Sales Office. Tickets cost $10 each, are non refundable, and will only be sold in pairs. The seats are located in the second level, row J, seats 7-10.

T-100 Consolidated Warehouse Grand Opening

The Lab community joined the Procurement & Property Management Division (PPM) at a ribbon-cutting ceremony on Wednesday, February 14, to celebrate the consolidation of three warehouses into the new T-100 warehouse, which provides a more functional space. According to Mary-Faith Healey, PPM Manager, the consolidation reduced the total number of line items from 13,000 to 5,200 and will save the Laboratory over one million dollars per year. PPM maintains a stock of items, which include everything from paper towels to electronic components — all of which can be ordered on-line at http://130.199.76.90/picktick/.

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Pictured at the dedication ceremony (from left) are: David Dale, PPM; Shelby Williams, PPM; Barbara Langhorne, PPM; George Dioguardo, PPM Stockroom Supervisor; Mary-Faith Healey, PPM Division Manager; Laboratory Director John Marburger; Brian Sack, Assistant Laboratory Director for Finance & Administration; and Peter Cancel, PPM.

Arrivals & Departures

Arrivals

Alexandros G. Georgakilas
Biology

Michael A. O'Donnell
Superconducting Magnet

Marc D. Pfeffer
NSLS

Departures

Betsy A. Dowd
NSLS

Joseph Dvorak
Chemistry

Norman Holden
Reactor

Caroline F. Kramer
Reactor

Michael J. O'Brien
Independent Oversight Office

Patricia A. Riche
Environmental Restoration Division

Smita Sathe
Collider Accelerator

Calendar

(continued)

***Hospitality Potluck Party**
5:30 p.m., Recreation Bldg. All are welcome, especially newcomers to the Lab. Bring your family, friends, and your favorite dish to share. For more information, contact Mimi Luccio, 821-1435, or Luise Woltering, 744-7964.

—WEEK OF 3/12—

Tuesday, 3/13

***Income Tax Workshop**
noon-1:30 p.m., Recreation Bldg.

Wednesday, 3/14

***Summer Camp Expo**
11 a.m. - 2 p.m., Berkner Hall Long Island summer camps will be providing facility and registration information to BNLers. For more information, contact Sue Foster, Ext. 2888, or foster2@bnl.gov.

Thursday, 3/15

***Income Tax Workshop**
noon-1:30 p.m., Recreation Bldg.

Science, Politics, & Budgets Talk
Noon, Berkner Hall, Room B. The talk will be presented by Peter Bond, Director's Office, and will focus on how the Washington D.C. budget process works and how scientists' role in the political process can be either constructive or destructive.

BERA Bridge Club
7 p.m., Berkner Hall cafeteria For more information, contact Morris Strongson, Ext. 4192, mms@bnl.gov.

—WEEK OF 3/19—

Wednesday, 3/21

BERA Ski Trip
Brodie Mt., Massachusetts $45, includes bus transportation and lift ticket. Bus leaves Brookhaven Center at 5 a.m.

Brookhaven Lecture
4 p.m., Berkner Hall. Jose Rodriguez will speak on "Environmental Catalysis: SO_2 Surface Chemistry on Oxides and Metals."

Thursday, 3/22

Apheresis Blood Drive
Brookhaven Center. BNL volunteers from the previous apheresis drive are scheduled to donate platelets. For more information, contact Sue Foster, Ext. 2888, or foster2@bnl.gov.

Friday, 3/23

Women Engineer's Lunch Networking Meeting
Noon, Berkner Hall, Room A. Contact Arlene Zhang, Ext. 5369.

Note: This calendar is updated continuously and will appear in the Bulletin whenever space permits. Submissions must be received by the preceding Friday at noon to appear in the following week's Bulletin. Please enter the information for each event in the order listed above (date, event name, description, and cost) and send it to bulletin@bnl.gov. Write "Bulletin Calendar" in the subject line.