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Press Release

National LambdaRail Selected for Large Hadron Collider Network

To provide platform for U.S. researchers to participate in experiments with world's largest particle accelerator

Cypress, CA, May 28, 2009 -- National LambdaRail (NLR), the cutting-edge network for advanced research and innovation owned by the U.S. research and education community, announces it has been selected as a provider of ultra high-performance, fiber optic circuits which will enable researchers in the U.S. to participate in the next-generation experiments now getting underway with the Large Hadron Collider (LHC), the world's largest and highest-energy particle accelerator located at the European Laboratory for Particle Physics, CERN, in Geneva, Switzerland.

The contract was awarded by CERN and the California Institute of Technology (Caltech) which jointly oversee implementation, operation and management of the U.S.- CERN network.

The LHC probes deeper into matter than ever before, permitting scientists to penetrate still further into the structure of matter and recreate the conditions prevailing in the early universe, just after the "Big Bang."

To contribute effectively to the LHC physics program, U.S. researchers need an extremely high-capacity network, capable of moving up to 100 Petabytes of data per year, accessing complex computing and data resources, and enabling real-time collaboration between multiple remote locations. In addition to state of the art, high-throughput methods and tools, to support the rigorous computational demands of the LHC experiments, the network must operate at 99.9+% availability.

NLR will provide two 10-Gigabit per second circuits between Chicago and New York, enabling LHC data access and exchange by the two U.S. "Tier 1" facilities collaborating with CERN, the Fermi National Laboratory near Chicago and Brookhaven National Laboratory near New York City. In addition, numerous smaller, "Tier 2" centers, where most of the data analysis will take place, will also be connected. In coordination with Caltech and CERN, the contract roadmap calls for introduction of 40-Gigabit and 100-Gigabit technologies when service and cost requirements are met.

"A robust and high-performance, highly available network interconnecting U.S. institutions and CERN is an essential resource for U.S. participation in the LHC experiments," according to Harvey Newman, Professor of Physics at Caltech and Principal Investigator of US LHCNet. "NLR's leading-edge optical infrastructure and long experience serving the research and education community were key factors in the decision to award NLR this contract. We also were pleased with NLR's flexibility and responsiveness in helping us to select the most cost-effective, diverse routes between New York and Chicago."

"Our focus at NLR is contributing to the ongoing innovation leadership of U.S. researchers and research organizations, thus enhancing the competitiveness of the U.S. economy," said Tom West, president and CEO, NLR. "We're delighted to be able to ensure full participation for the U.S. in the ground-breaking research made possible by the Large Hadron Collider."

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About National LambdaRail (NLR)
Owned by the U.S. research and education community, NLR is the most technically advanced, flexible and cost-effective network dedicated to the needs of researchers and research organizations. For more information, please visit http://www.nlr.net.