National Synchrotron Light Source II achieves first stored electron beam

April 11 2014, by Chelsea Whyte

(Phys.org) —Scientists and engineers at the U.S. Department of Energy's Brookhaven National Laboratory achieved a major milestone in the commissioning of the state-of-the-art National Synchrotron Light Source II (NSLS-II) on April 5, 2014. For the first time, Associate Laboratory Director for Photon Sciences Steve Dierker and his project team were able to store electron beam in the NSLS-II storage ring overnight Friday

into Saturday, with an initial beam lifetime of about three hours.

Laboratory Director Doon Gibbs called it a "significant advance" and said, "Achieving stored beam means the team can now accelerate further optimization of the storage ring. Thanks in particular go to Division Director for Accelerator Systems Ferdinand Willeke for his strong leadership of the design, construction, and commissioning of the NSLS-II accelerator systems."

This achievement is the result of more than seven years of planning, design, construction, and commissioning by the Photon Sciences staff.

More details on the technical aspects of this accomplishment and the next steps will be coming soon.

Provided by Brookhaven National Laboratory