

The Beams and Applications Seminar Series

NSLS-II Lattice Design

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Bldg. 401, Room B-4100

Monday July 9, 9:30 am

Host: Kwang-Je Kim

NSLS-II is a 3-GeV third generation light source that is under construction at the Brookhaven National Laboratory. The 30-cell 792m long storage ring will achieve 0.9nm emittance with the installation of 21m damping wiggler. In this presentation I will review the physics considerations for the design of the lattice and the magnets. Particularly, I will talk about the choice of type and number of magnets, drift standardization, nonlinear optimization approach and the introduction of a third chromatic knob, and the specification of the magnetic parameters and engineering tolerances. The project has entered the installation phase; therefore feedback from engineering will also be discussed.

For more information visit

http://aps.anl.gov/News/Meetings/Beams_and_Applications_Seminars/

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(mnolasco@aps.anl.gov, 630-252-6159) to arrange for a gate pass.