

The Beams and Applications Seminar Series

Feasibility of Diamond Cavities for the XFEL Oscillator

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Bldg. 401, Room B2100

Friday, April 03, 1:30 pm

Host: Kwang-Je Kim, ASD

Recent experimental results will be presented on the feasibility of x-ray cavities for the XFEL Oscillator (XFELO) with diamond single crystals. After a brief introduction to the principles of the XFELO and different XFELO optical cavity schemes, new studies of the reflectivity, spectral bandwidth, low-temperature thermal expansion, resistance of diamond crystals to heatload and nanoradian angular stability of multi-crystal arrangement will be discussed. We believe the experimental results provide strong evidence for the feasibility of x-ray cavities with diamond crystals.

For more information visit

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

Visitors from off-site please contact Carmen Nolasco
(mnolasco@aps.anl.gov, 630-252-6159) to arrange for a gate pass.