

The Beams and Applications Seminar Series

Wakefields in the LCLS Undulator Vacuum Chamber

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Bldg. 401, Rm. B2100
Friday, February 29, 1:30 pm

Host: Marion White, ASD

The Linac Coherent Light Source (LCLS) at SLAC will use very short bunches with a large peak current. For such beams, the impedance caused by submicron imperfections in the vacuum beam tube may generate an additional energy spread within the bunch. We review the mechanism of the roughness impedance and the tolerances it imposes on the surface properties of the vacuum chamber. We also compare it with the resistive wall impedance in the chamber and present the simulated LCLS performance with account of these impedances.

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.