

ACCELERATOR SEMINAR

“Free-Electron Laser Theory for Coherent Electron Cooling”

*Stephen Webb,
Stony Brook University*

Coherent Electron Cooling is a novel proposed method of reducing the energy spread of high energy hadron beams. Its implementation requires a detailed understanding of the phase space evolution of the free-electron laser instability. I will present a theoretical description of the FEL instability using a Maxwell-Vlasov treatment, which leads to an interesting result regarding the number of growing modes in the FEL process.

**Thursday, April 7, 2011
3:30 p.m.
CEBAF Center, Room F113**

Coffee before seminar beginning at 3:15 p.m.