

ACCELERATOR SEMINAR

“Linear Optics Correction and Electron Cloud Effect in the SNS Ring”

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In order to achieve a more robust and optimal performance, the beam loss in the SNS ring needs to be understood and improved. In this talk, I will discuss the linear optics discrepancy between the online model and real machine, and present a set of field adjustments of quadrupole magnets to correct this discrepancy. In the second part of the talk, I will discuss the electron cloud effect in the SNS ring, which is a potential obstacle for SNS power upgrade. A series of observations of the electron-proton instability is presented and the physics behind these phenomena will be discussed.

Thursday, March 10, 2011

11:00 a.m.

CEBAF Center, Room F113

Coffee before seminar beginning at 10:45 a.m.