

Workshop on Broadband Impedance Measurements and Modeling
February 28th – March 2nd, 2000
SLAC, Stanford, California

The future generation of electron storage rings for synchrotron light sources or damping rings for linear colliders will require very low impedance vacuum systems, the design of which relies heavily on the impedance modeling. This workshop will have three goals: first, examine the accuracy of the impedance models by comparing calculations, bench measurements, and beam measurements from recently commissioned rings; second, discuss techniques of quantifying the impedance models that are relevant for estimating the instability thresholds but are still useful to compare to bench and beam measurements; finally, consider instability mechanisms and components of the impedance that may limit the performance of future storage rings as the vacuum chamber impedance is further reduced.

Working Groups:

Measurements and calculation comparisons
Models and calculation limitations
Instabilities

Tentative Schedule:

Monday: Morning plenary session: 9am – 12pm
9:00 Introduction
9:15 Single bunch instabilities
10:00 Coffee break
10:30 Impedance measurements and models
11:15 Parameters of future rings
11:45 Tentative working group programs
Lunch: 12 - 1pm
Afternoon working group session: 1pm – 4pm (coffee 3:30 – 4:00)
Invited talk: 4pm – 5pm

Tuesday & Wednesday: Review of previous day and schedule: 8:30am – 9am
Wednesday: Morning working group session: 9am – 12pm (coffee 10:15 – 10:45)
Lunch: 12 - 1pm
Afternoon working group session: 1pm – 4pm (coffee 3:30 – 4:00)
Invited talk: 4pm – 5pm

Thursday: Working group close-out: 9am – 11am

Organizing Committee: John Corlett (LBNL), Tor Raubenheimer (SLAC), Marc Ross (SLAC)
The workshop fee is \$100. Please register by e-mail to: robbin@slac.stanford.edu.