**Testbed Discussion
(Brainstorming Session II)**

Coordinators: C. Pellegrini & T. Raubenheimer

Talks: slides will be available

Raubenheimer:

Risk of failure of a big facility needs to be reduced by R&D

A lot of R&D can be done existing user facilities; limited access issue

Yakimenko:

Description of ATF

Neil:

Comments on FLS in Sept 2009 as good reference

No one testbed can answer all R&D aspects

CW: limit of low gradient injector; Cornell has made progress

XUV oscillators; may use 20% reflectivity mirrors in a regenerative amplifier

Description of JLAMP

Leemans:

Straw man facility design: multiple beam lines from one big laser system

Pellegrini: slides available

Noise reduction can reduce laser seeding requirements

Contour laser pulse to control ebeam wake fields: eliminating horns

Velocity bunching: no CSR from straight ahead electrons

Integrated facility to try many improvements simultaneously

Double compressors to reduce CSR

Light source facility access model can be used

Open Discussion:

ME: important for universities to have acc programs; thesis projects can be done

GN: agreed and said JLAB is building closer links to universities

WL: is JLAB the ideal test facility?

GN: limited by old injector; new injector like Cornell would be key upgrade

GW: does the testbed need to be SRF?

CP: only for some applications, much could be done with NCRF

JB: 1 GeV is close to being a full soft xray FEL facility already; why a GeV, why not a few hundred MeV?

CP/TR: want to do seeding at a higher energy so space charge doesn't wash out things

GW: most FLASH users would like a higher rep rate

CP: biological may not need it

WL: micro bunching is seen in laser plasma exps; further exps can be done now

GW: modeling has made advances, how good is it?

CP/TR: good modeling for LCLS, not good enough for all extrapolations to new regimes

EL: she likes the wish list; we will talk about this more in the future; DOE is evolving in their thinking on this matter; want community to self organize and collaborate