

Schedule of ILC-DR study at KEKB

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ILCDR@KEKB meeting

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Roadmap of KEK is still ambiguous but rough schedule comes out

- KEKB accumulates luminosity 1at^{-1} at around 2009 March.
- KEKB upgrade is planned during 2009-2012.
- Vacuum chambers are replaced by ante-chambers in the upgrade.
- Effect of ante-chamber can be measured.
- The chance of the machine experiments will be limited to early 2009 as well as right before restart in 2012.
- Upgrade schedule, when chambers are replaced, is decided soon (this year?).

- Schedule of X ray monitor and others development.
- Apr-July 2009, or Oct-Dec 2009.
- Jan-Mar 2012 or later (combined KEKB experiment?)
- Budget

Recent progress

- CESR got a positive answer from NFS.

Some Recent Happenings

- At SC 07, Open Science Grid achieved milestone of >80 Gbps data flow
 - Physics Frontiers Centers competition reviewed 58 preproposals, inviting 19
 - DUSEL town meeting in DC involves community in discussions of initial suite
 - NSF and DOE partner to enable CESR TA to perform critical path R&D for the ILC
 - US and other regions participate in ASPERA
 - Noticeable blossoming of POU-style physics
- Super (upgrade) KEKB goes toward a high current scheme.
 - The Road map of KEK is still ambiguous.
 - X ray monitor is hard to prepare in 2009 Apr.

Focus what we should do

- The electron cloud build up does not depend on the emittance strongly.
- The cloud density depends on energy and current for photoemission dominant, and depend only on current for multipactoring or space charge dominant.
- The instability depends on the emittance, energy and damping time.
- We can not realize the damping ring condition anyway.
- For the coherent instability, it is important to understand how the threshold depends on the parameters.
- For an incoherent effect, beam size measurement without current dependence is necessary. It seems to be difficult in present KEKB tool.

Proposal or study plan report

- I ask you to write manuscript of each part.
- The deadline is the end of January.
- Submit a paper to EPAC?

- ILC Damping ring workshop is held at KEK on 18-20 Dec. Everyone is welcome.