

## Third ILC Damping Rings R&D Mini-Workshop

*KEK, Tsukuba, Japan*

18-20 December 2007

# Introduction: Damping Rings in the Engineering Design Phase

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## ILC Damping Rings Mini-Workshops



### Cornell University, September 2006

- Electron cloud
- Fast injection/extraction kickers
- Impedance and impedance-driven instabilities



### INFN Laboratori Nazionali di Frascati, March 2007

- Ion effects
- Lattice design
- Low-emittance tuning



### KEK, December 2007

- Electron cloud
- Fast injection/extraction kickers
- Impedance and impedance-driven instabilities

## Workshop Goals

1. To provide an opportunity for discussion of progress in R&D for the ILC damping rings in the areas of:
  - electron cloud
  - fast injection/extraction kickers
  - impedance and impedance effects
  
2. To review plans for further R&D in these areas through the ILC Engineering Design Phase.
  
3. To discuss the two main options for the baseline lattice, and agree on a recommendation for the baseline lattice to be used through the engineering design phase.

## Schedule

	Tuesday, 18 December 2007	Wednesday, 19 December 2007			Thursday, 20 December 2007
	<i>Plenary</i>	<i>Two or three groups in parallel at any time</i>			<i>Plenary</i>
	<i>Building 4 Seminar Hall</i>	Kickers	e-cloud/FIL	Impedance	
08:30 - 09:00	Registration	<i>Bldg 4 Rm 414</i>	<i>Bldg 4 Rm 345</i>	<i>Bldg 4 Rm 346</i>	<i>Building 4 Seminar Hall</i>
09:00 - 09:30	Intro: Ross/Walker/Wolski	Burkhart (WebEx)		Li (WebEx)	e-cloud summary
09:30 - 10:00	EDR Lattice: Emery	Alesini		Furuya	
10:00 - 10:30		Guiducci	Chae	Kickers summary	
10:30 - 11:00	Coffee	Coffee			
	<i>Building 4 Seminar Hall</i>	<i>Bldg 4 Rm 414</i>	<i>Bldg 4 Rm 345</i>	<i>Bldg 4 Rm 346</i>	Coffee
11:00 - 11:30	e-cloud: Pivi (40'); Palmer (25'); Ohmi (25')		Celata (WebEx; 25'); Wang (WebEx; 15'); Demma (25'); Suetsugu (25')	Marcellini	<i>Building 4 Seminar Hall</i>
11:30 - 12:00			Hock	Impedance summary	
12:00 - 12:30			Korostolev		
12:30 - 14:00	Lunch	Lunch			Close
	<i>Building 4 Seminar Hall</i>	<i>Bldg 4 Rm 414</i>	<i>Bldg 4 Rm 345</i>	<i>Bldg 4 Rm 346</i>	
14:00 - 14:30	e-cloud: Malyshev		Ohnishi (25'); Hyunchang (15'); Flanagan (25'); Terunuma (25')	Urakawa	
14:30 - 15:00	Impedance: Ng			Discussion: EDR Deliverables and Schedule	
15:00 - 15:30	Impedance: Stupakov				
15:30 - 16:00	Coffee	Coffee			
	<i>Building 4 Seminar Hall</i>	<i>Bldg 4 Rm 414</i>	<i>Bldg 4 Rm 345</i>	<i>Bldg 4 Rm 346</i>	
16:00 - 16:30	Kickers: Mattison	Discussion: EDR	Discussion: EDR Deliv		
16:30 - 17:00	Kickers: Naito	Deliv and Sched	and Sched		
18:00 - 20:00	Banquet				

## Charge to the Working Groups/Conveners

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The conveners should present summaries on Thursday morning:

- Mauro Pivi (ecloud)
- Tom Mattison (fast kickers)
- Marco Venturini (impedance)

In the summaries, we should hear:

- A report on progress since the Cornell workshop.
- A list of (prioritized) issues and items for research, development, and design, with rough timescales and resource requirements.
- A list of deliverables for the engineering design phase, with:
  - deadlines;
  - contributors and resources.
- **How can we reduce costs?**