ILC Damping Rings Update

Andy Wolski
U. Liverpool/Cockcroft Institute

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CesrTA

- Most significant results from recent (successful) commissioning run were reported at ILC08, Chicago.
- Results (including RFA data) from the commissioning run are still being analyzed, in preparation for running in January.
- Preparing for down-time in February, in particular, for the chicane from PEP-II.
- Looking ahead to the next generation of test chambers:
  - **preparing a chamber to go to CERN for carbon coating;**
  - **work is starting on a wiggler chamber with grooves and electrodes.**
- Working hard to increase effort on the simulation studies:
  - **aiming for an additional 1.5 FTE at Cornell;**
  - **hoping for more involvement from ANL (Kathy Harkay), LBNL (Miguel Furman), and SLAC.**
- More information:
  https://wiki.lepp.cornell.edu/ilc/bin/view/Public/CesrTA/CollabMeetings#December_8_2008_Collaboration_Me

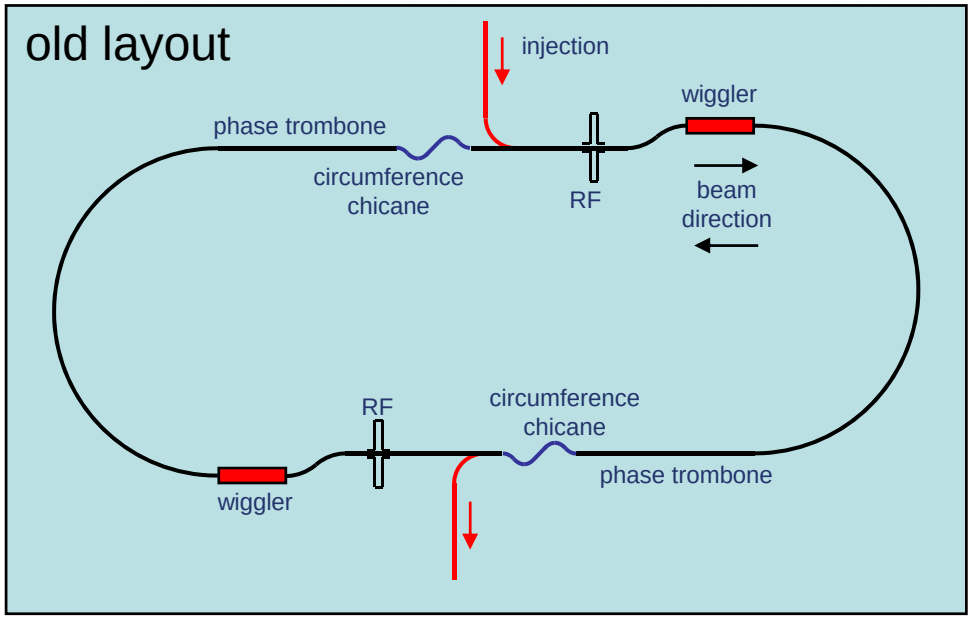
ATF: 7th Meeting of TB/SGC, 18/12/08

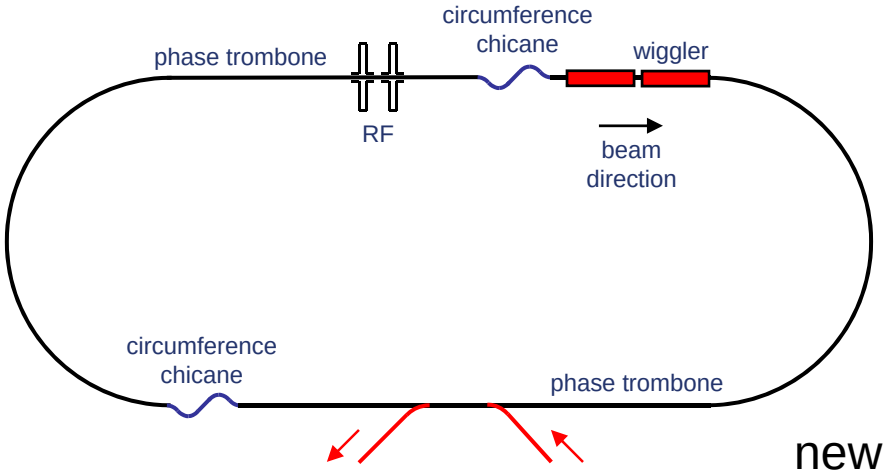
Agenda of the 7th TB and SGCs joint meeting, ATF International Collaboration

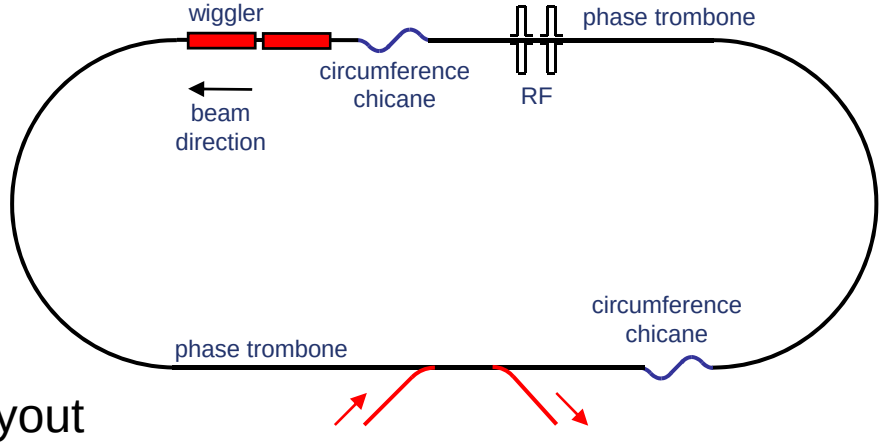
09:00-15:40		Open Session: Joint session of the 7th ATF-TB/SGC meeting and the 7th ATF2 project meeting. Status reports from May to December 2008 and presentations of new proposals	
09:00-09:10	10min	Opening address	J. Urakawa
09:10-09:50	40	Report of 7th ATF2 project meeting	A. Seryi
09:50-10:10	20	Laser Wire	S. Boogert
10:10-10:30	20	Fast Kicker R&D	T. Naito
10:30-10:45		15 min. Break	
10:45-11:05	20	FONT	P. Burrows
11:05-11:25	20	Compton	~TBA~
11:25-11:45	20	Others status from May 2008 (RF Gun, Alignment,...)	N.Terunuma
11:45-12:05	20	Beam tuning plan	~TBA~
12:05-12:20	20	Cold BPM	H. Hayano
		Lunch	
13:30-14:00	30	~Proposal 1~	
14:00-14:30	30	~Proposal 2~	
14:30-14:35		5 min. Break	
14:35-15:05	30	~Proposal 3~	
15:05-15:35	30	~Proposal 4~	
15:35-15:40		5 min. Break	
15:40-16:50		Closed Session: TB and SGC Joint Discussion , Preparation of Summary	
16:50-17:00		10 min. Break	
17:00-17:30	30	Open Session: Concluding remarks	A. Wolski
18:00		Bus Leave to ATF Year-End Party (Bounennkai, Unforgettable Party)	

Lattice modifications

- Modifications needed to put injection and extraction in the same straight, to simplify central injector layout.
- Lattice work (by Maxim Korostelev) is almost complete.







new layout

Minimum machine studies

- Identified critical issues
  - **Low power parameter set allows half the circumference with same current and bunch spacing (half train length).**
  - **Reduced circumference reduces impact of some collective effects, notably space charge. May allow reduction in energy.**
  - **Beam dynamics and costing will be based on specific lattice designs.**
- Proposed relevant studies
  - **Select one (from two available) 3 km lattices for further studies.**
  - **Develop lattice designs for injection/extraction lines (INFN-LNF).**
  - **Continue development of CAD and cost model (CI).**
  - **Continue development of impedance model (CI/INFN-LNF).**
- Resource requirements
  - **2 FTE at CI (1 FTE design engineer; 1 FTE beam dynamics/accelerator physicist);**
  - **1 FTE at INFN-LNF (beam dynamics/accelerator physics).**