



Damping Ring

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CFS Webex Meeting

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DR Parameters

	RDR DCO2	SB2009 DSB
Energy (GeV)	5	5
Circumference (m)	6476	3238
Bunch number	2610 - 5265	2610 - 1305
N particles/bunch	2x10e10	2x10e10
Damping time tx (ms)	21	21
Emittance ex (nm)	0.48	0.37
Emittance ey (pm)	2.0	2.0
Momentum compaction	1.7x10 ⁻⁴	1.8x10 ⁻⁴
Energy loss/turn (MeV)	10.3	5.3
Energy spread	0.0013	0.0013
Bunch length (mm)	6	6
RF Voltage (MV)	21	11
RF frequency (MHz)	650	650
B wiggler (T)	1,6	1,6
Lwig total	215,6	107,8
Number of wigglers	88	44

Half circumference

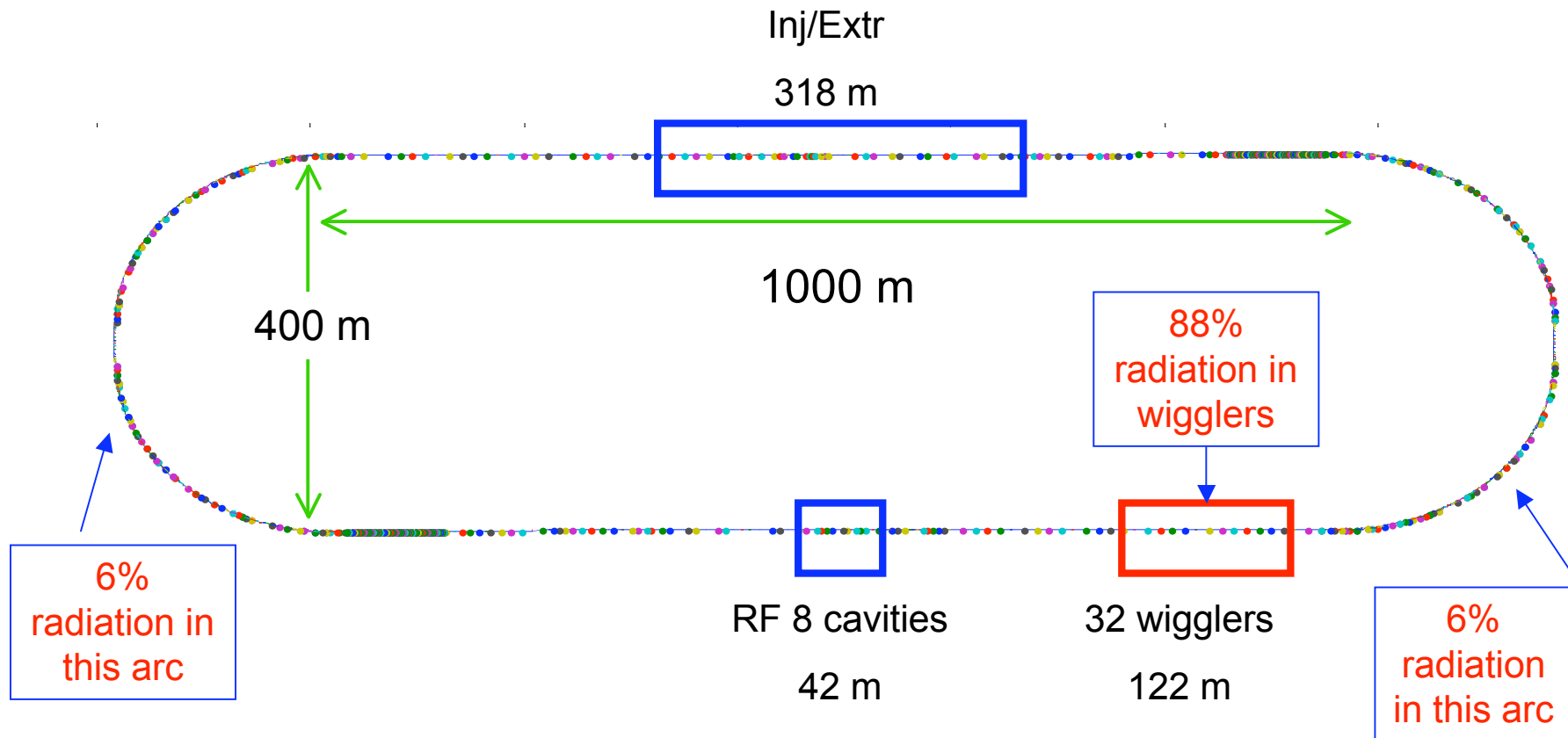
~Half RF cavities

~Half wigglers



SB2009 - DSB3 LATTICE

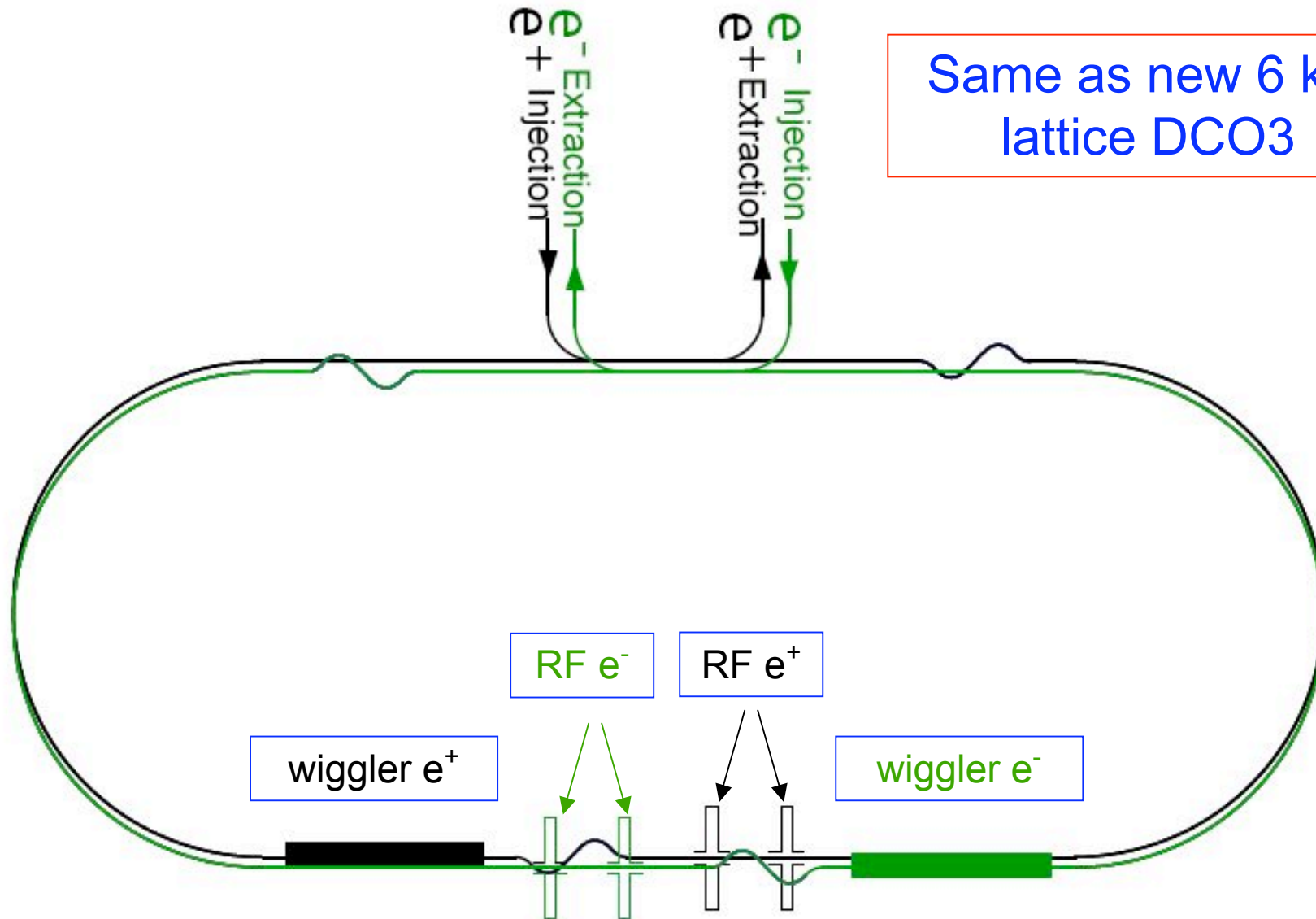
STRSECI: INJ/EXTRACTION



STRSECR: RF AND WIGGLERS



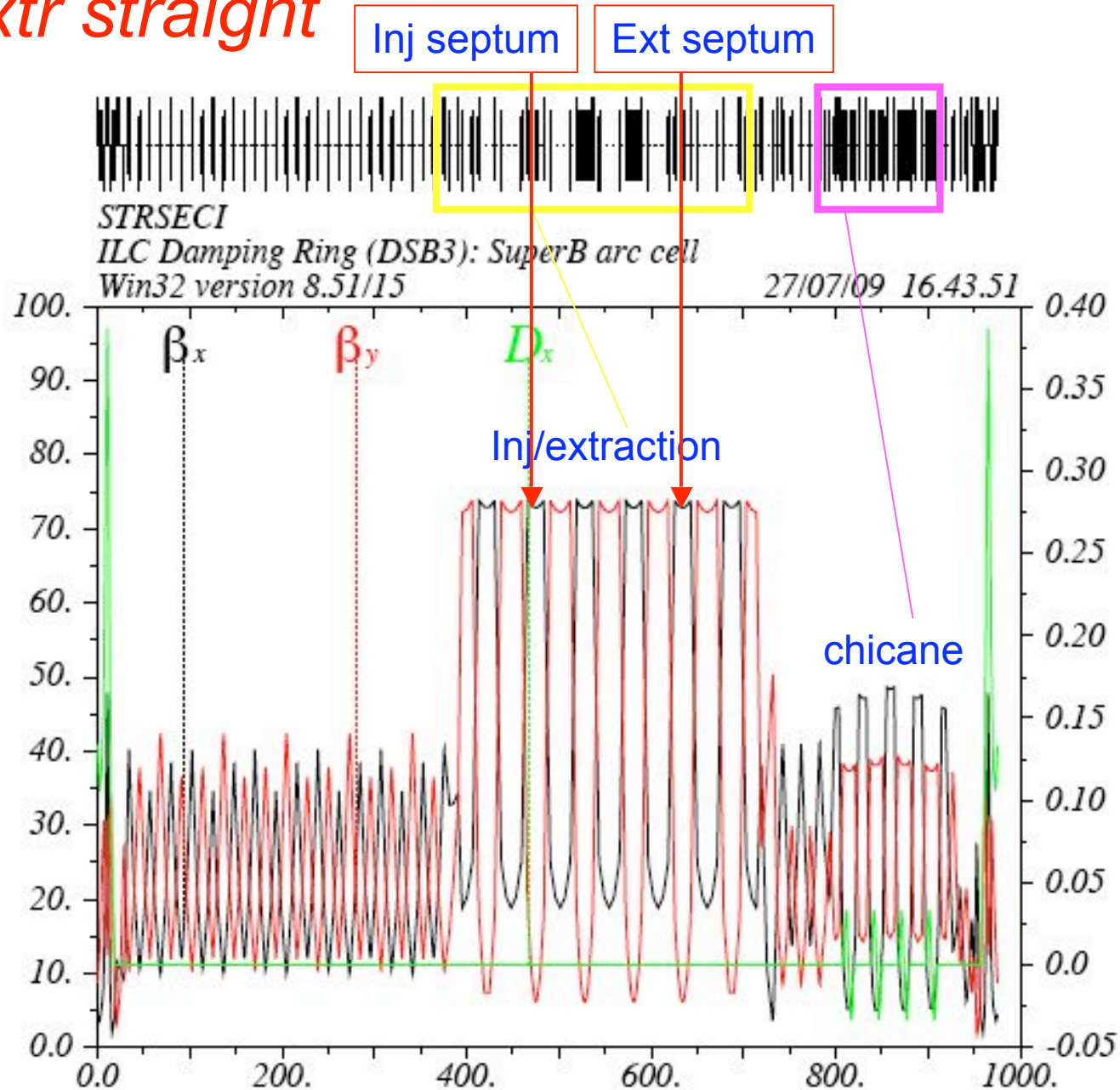
e^+/e^- Layout



Same as new 6 km lattice DCO3

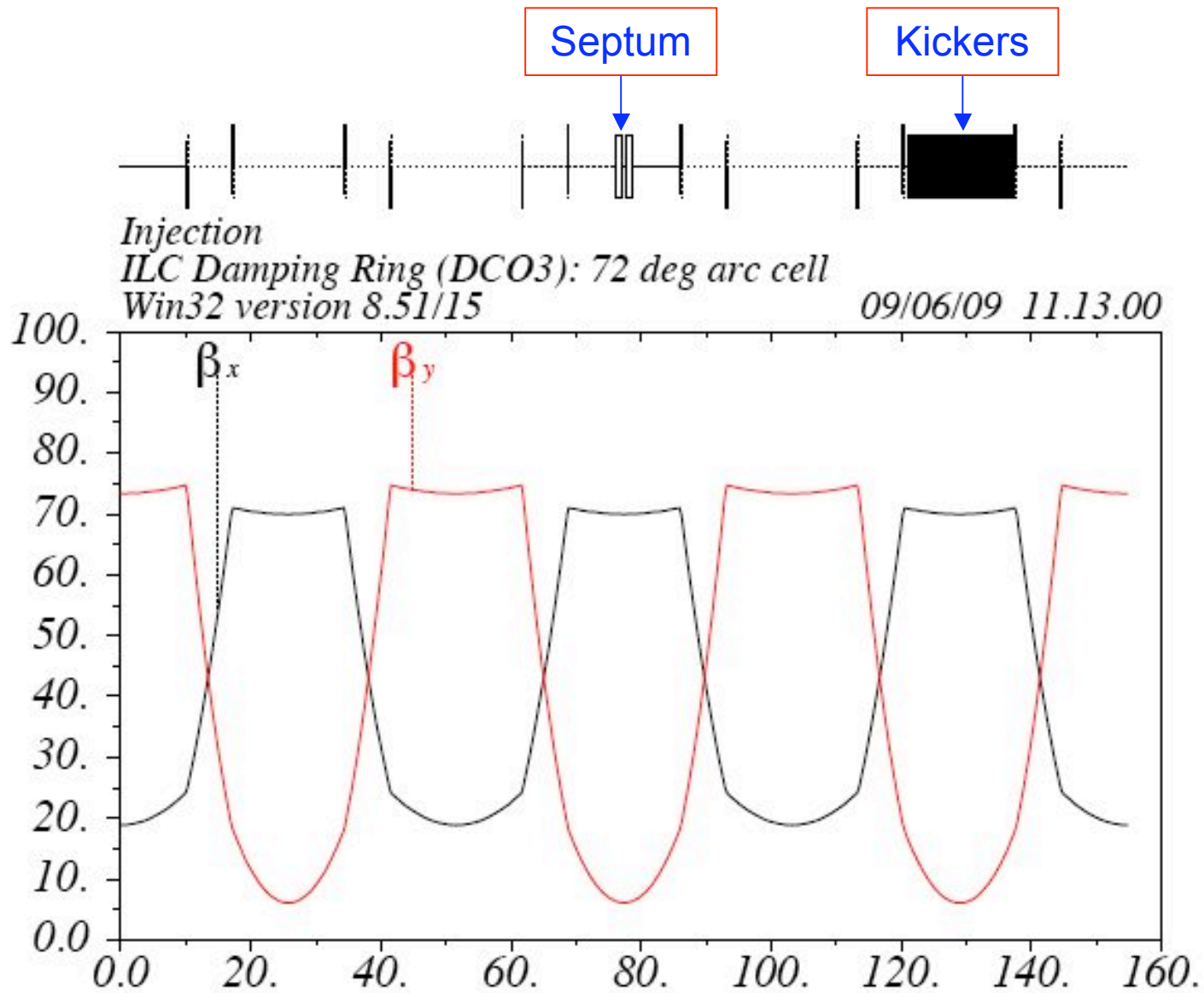
Inj/Extr straight

e^+
→

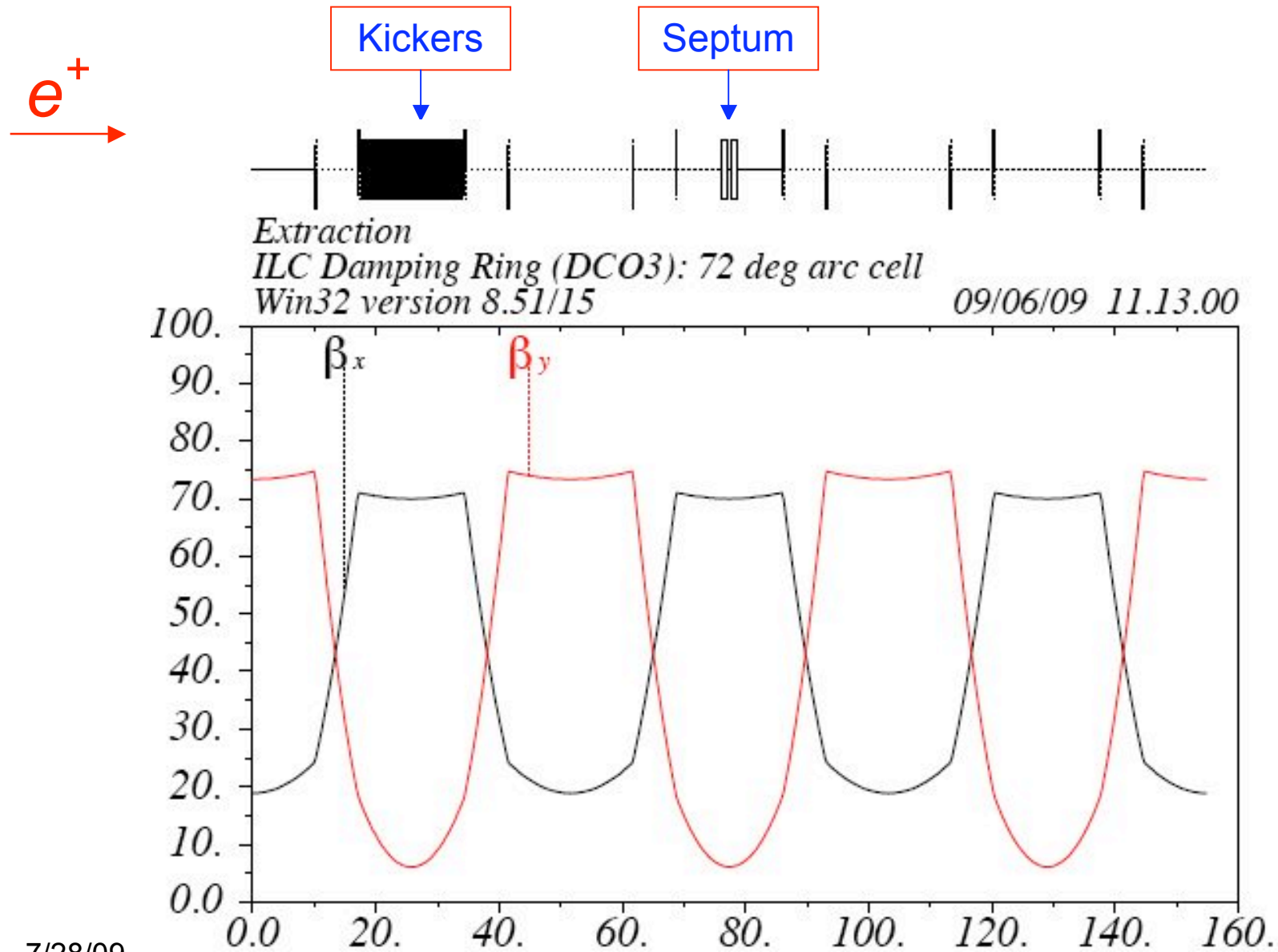


Injection e+

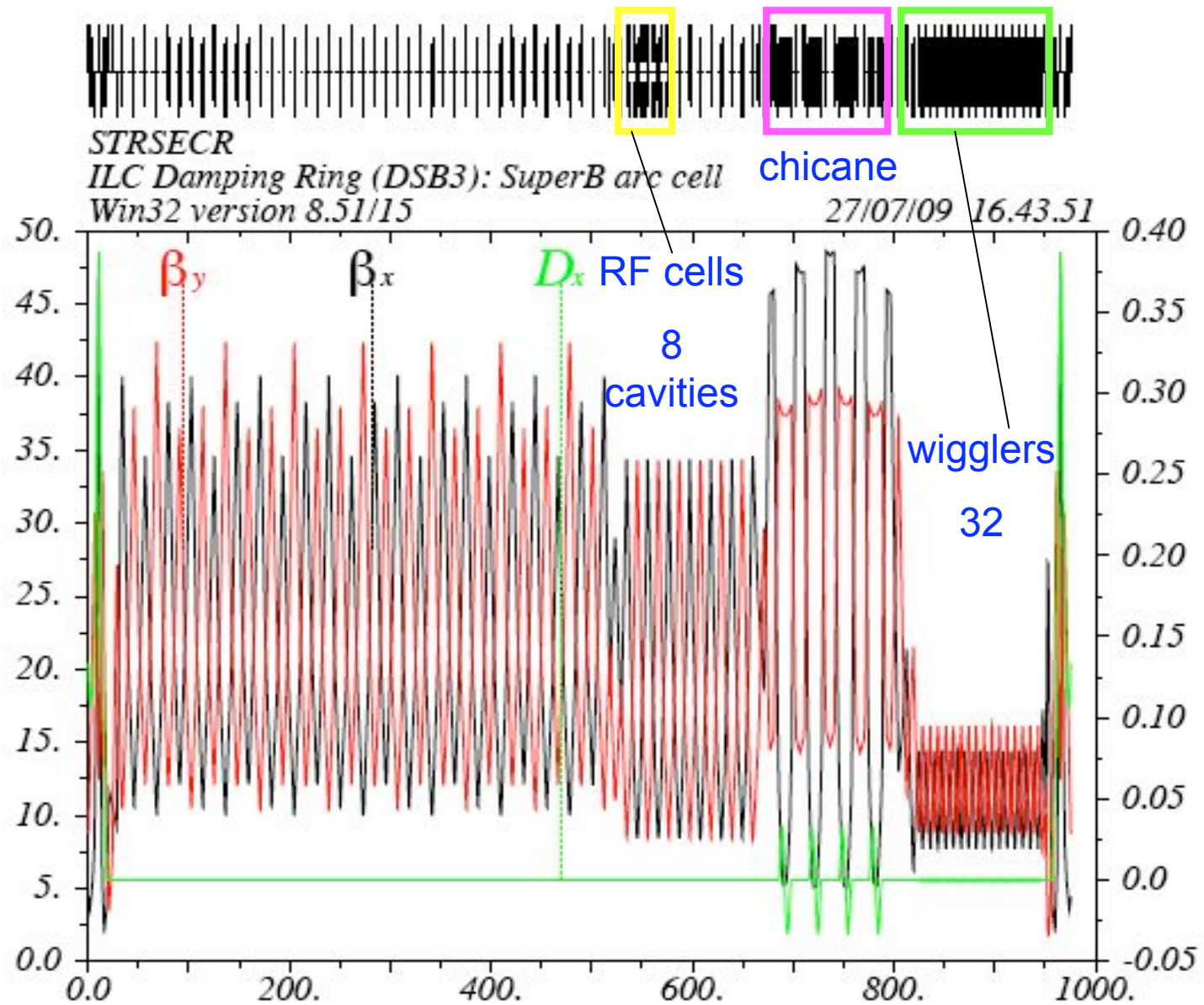
e^+ →



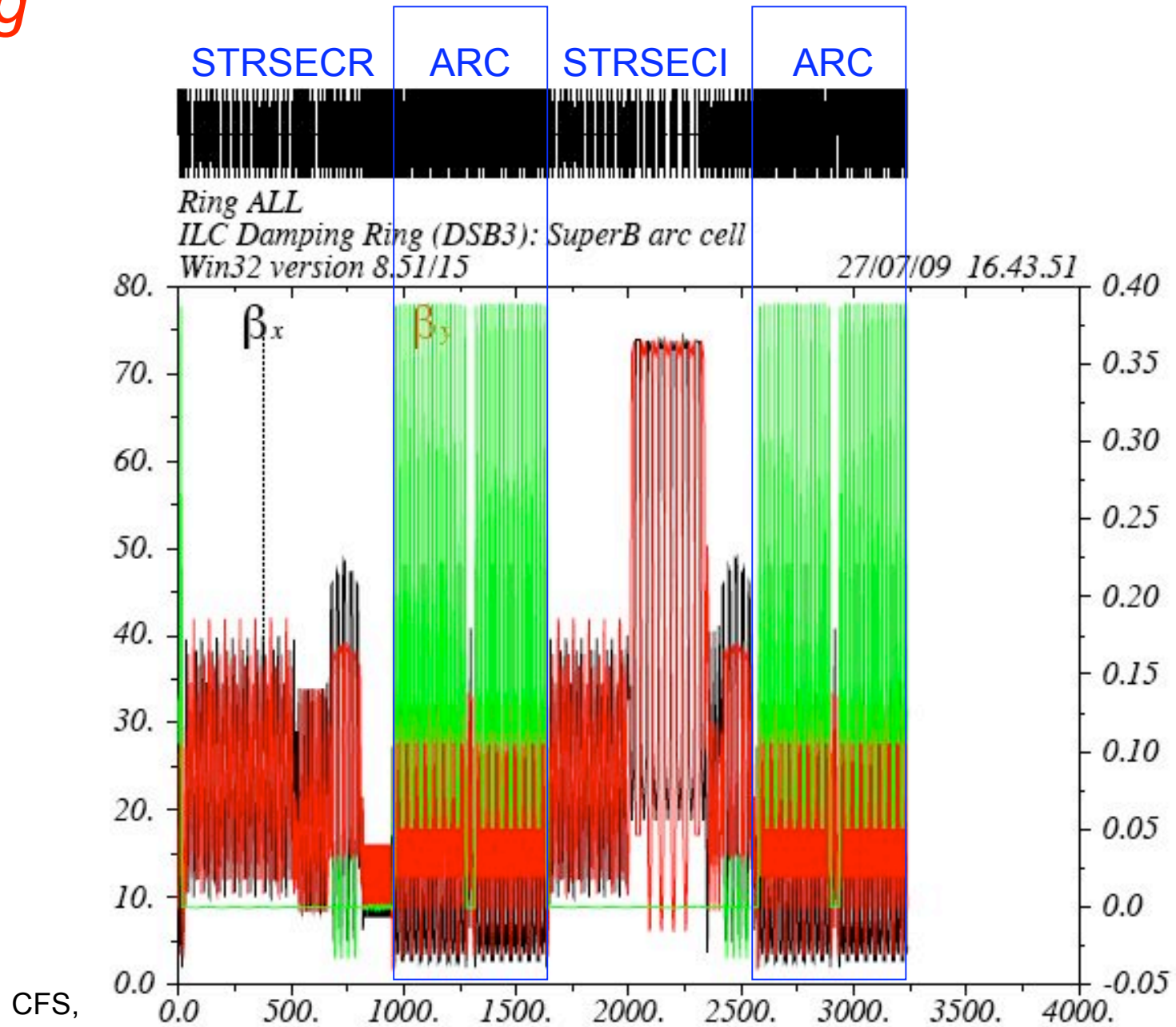
Extraction e^+



RF/wiggler straight section



Ring



7/28/09
Webex