

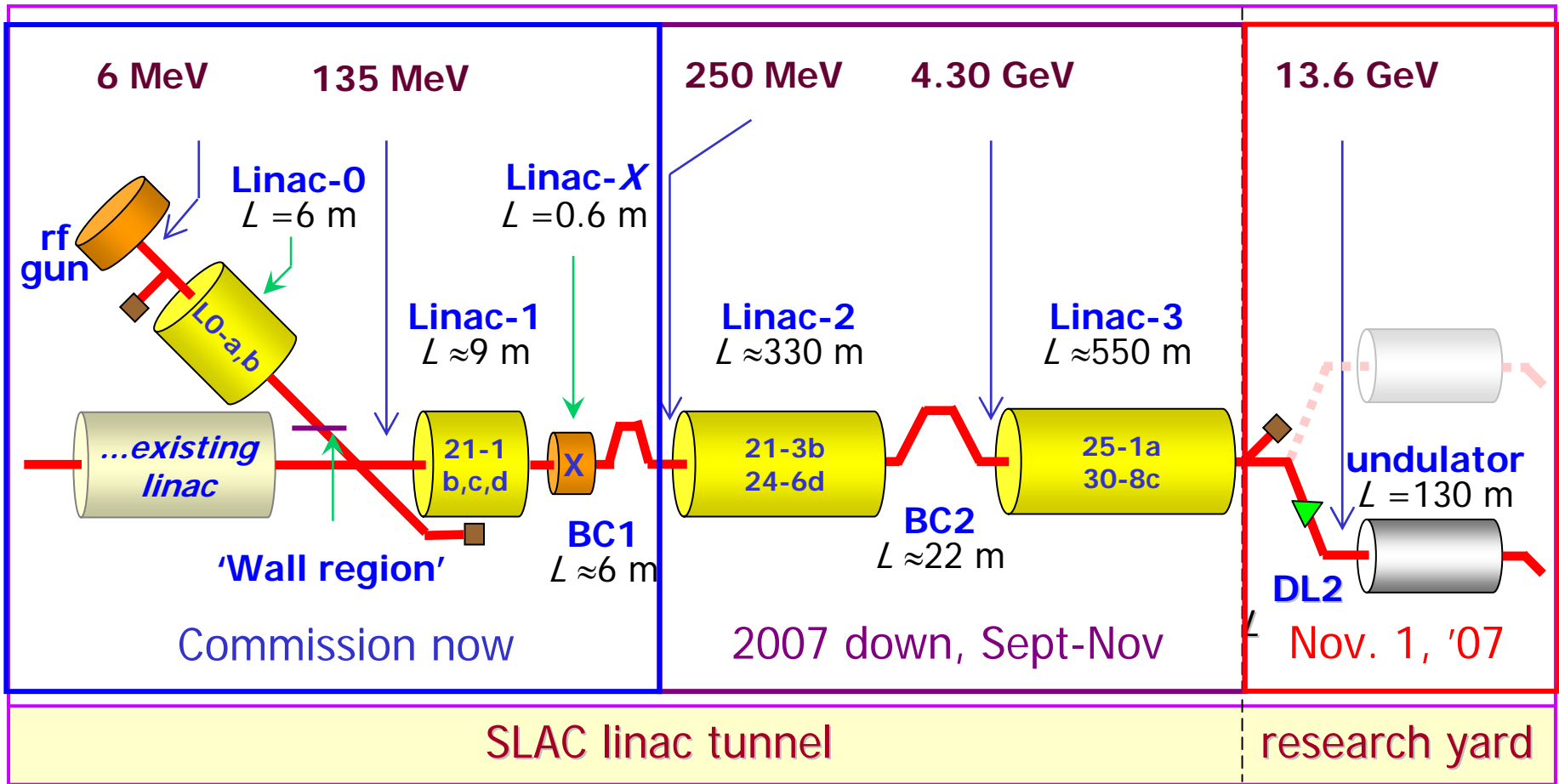
The Next (BC2) Phase of ***LCLS***

P. Emma

Feb. 28, 2007

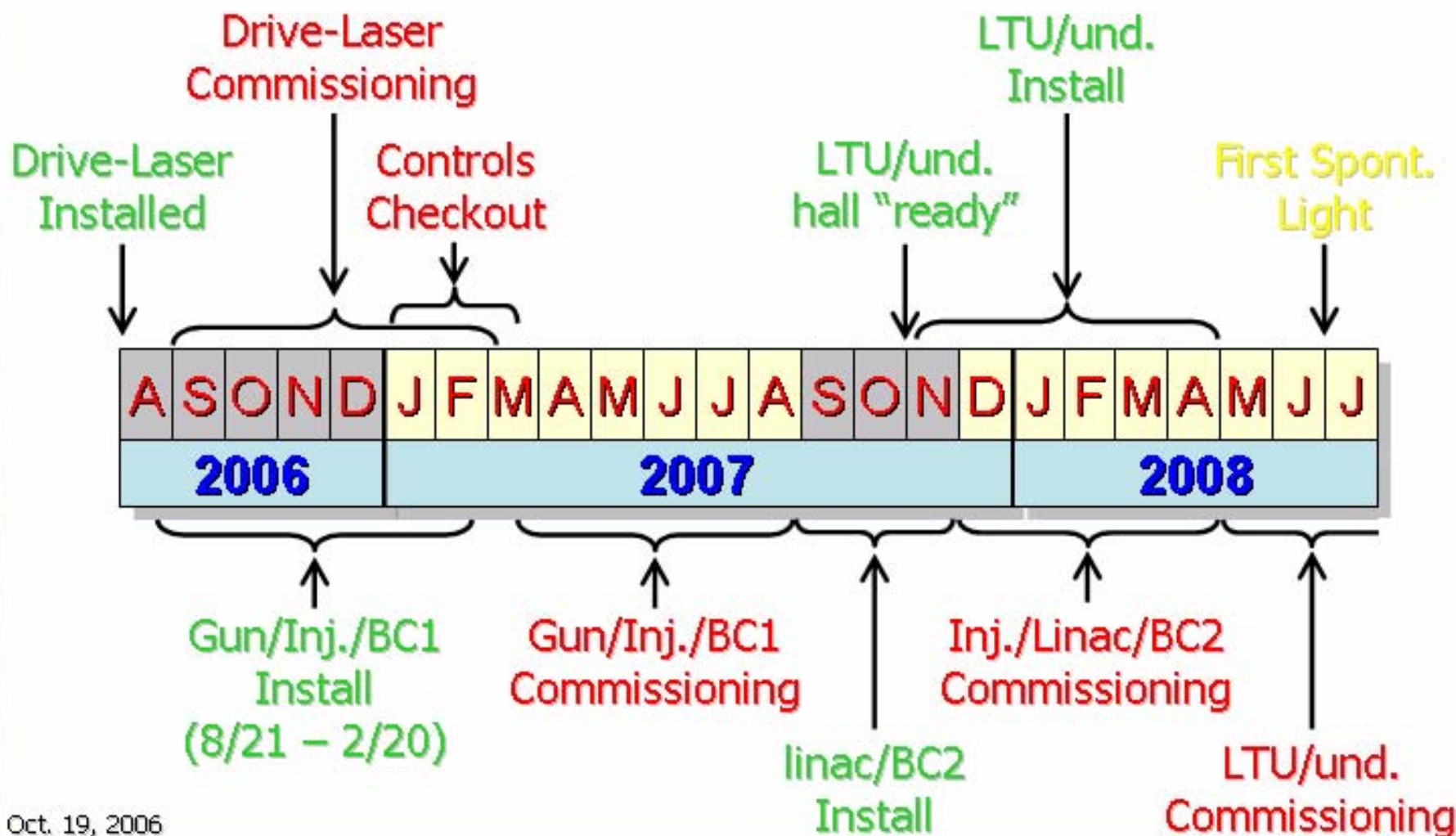
Thanks for all efforts to this point...

LCLS Accelerator Regions



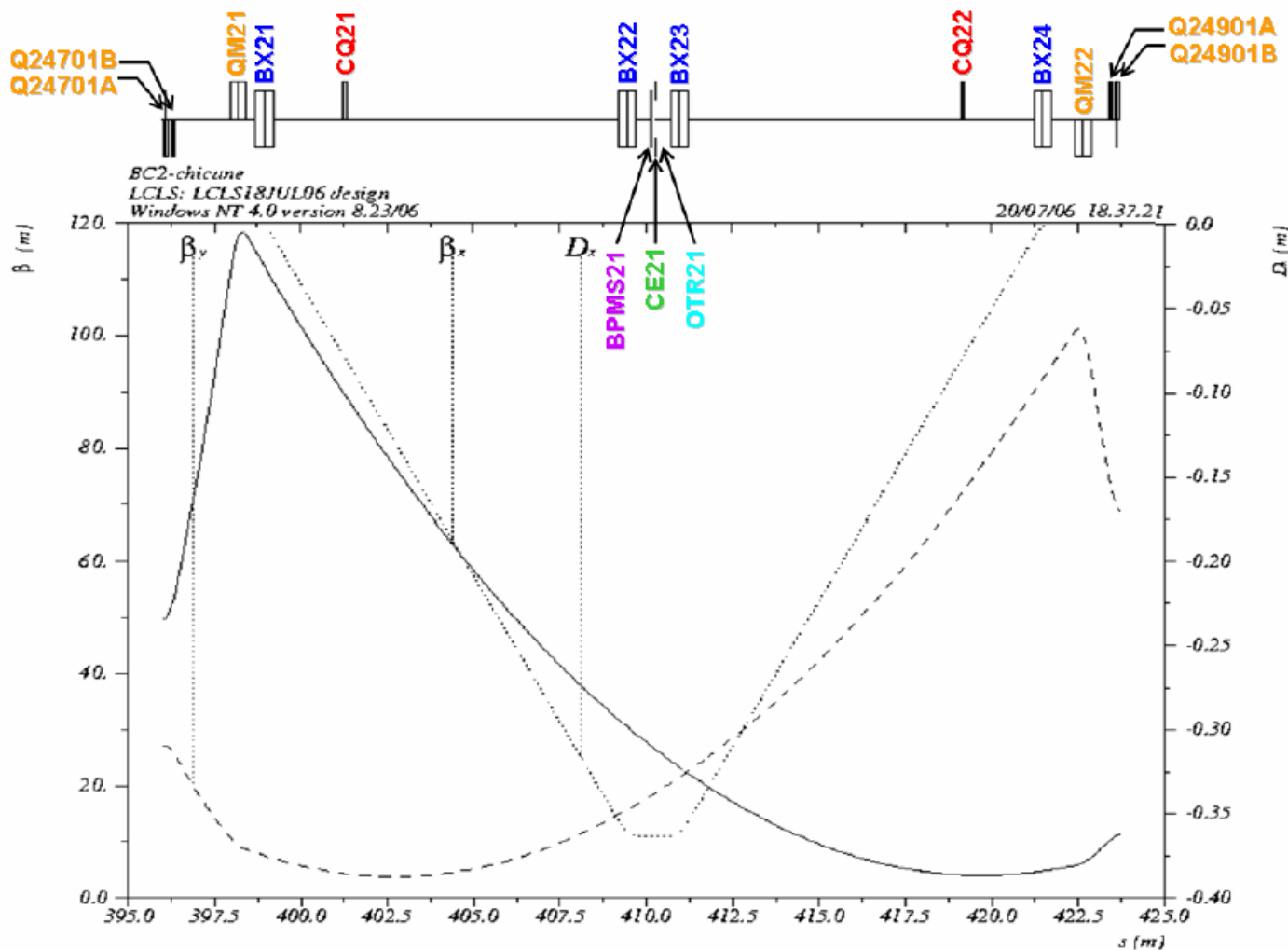
Down: Sep., Oct., Nov. of 2007
Run: Dec. 2007 through ~Aug. 2008
To: SL2-stopper in BSY (just past linac sector-30)

LCLS Installation and Commissioning Time-Line



Oct. 19, 2006

Modifications in Sector-24 for BC2



BC2 Area (sector-24):

- Remove 8 RF sections (24-7, 8)
- Remove quad Q24801
- Add 4 new bends in sector-24
- Add 6 new quads (3 types)
- Add 1 'wide' BPM
- Add 1 x-collimator
- Add 1 OTR screen
- Cross fingers...

Figure 2. Linac sector 24-7 and 24-8 after BC2 chicane installation, where accelerating sections 24-7a,b,c,d and 24-8a,b,c,d have all been removed.

Other Linac Modifications (Fall '07)

- Remove 15 three-meter long RF linac sections
 - Replace 3 three-meter long RF linac sections
 - Add 4 new wire scanners in sector-24
 - Remove all old 'NPI' components from sec-25
 - Add 3 OTR screens (1 BC1, 2 in sec-25)
 - Move LOLA (trans. deflector) from sec-29 to 25-2 (powered by the 24-8 klystron)
 - Add pulsed hor. dipole magnet in sec-25 (BXKIK)
 - Move 2 LI28 WIRE's, 44 & 544, by 20-30 meters
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- More feedback needed (energy & bunch length)
 - BPM electronics upgraded (resolution improved)
 - Many prayers to patron saint of electrons...