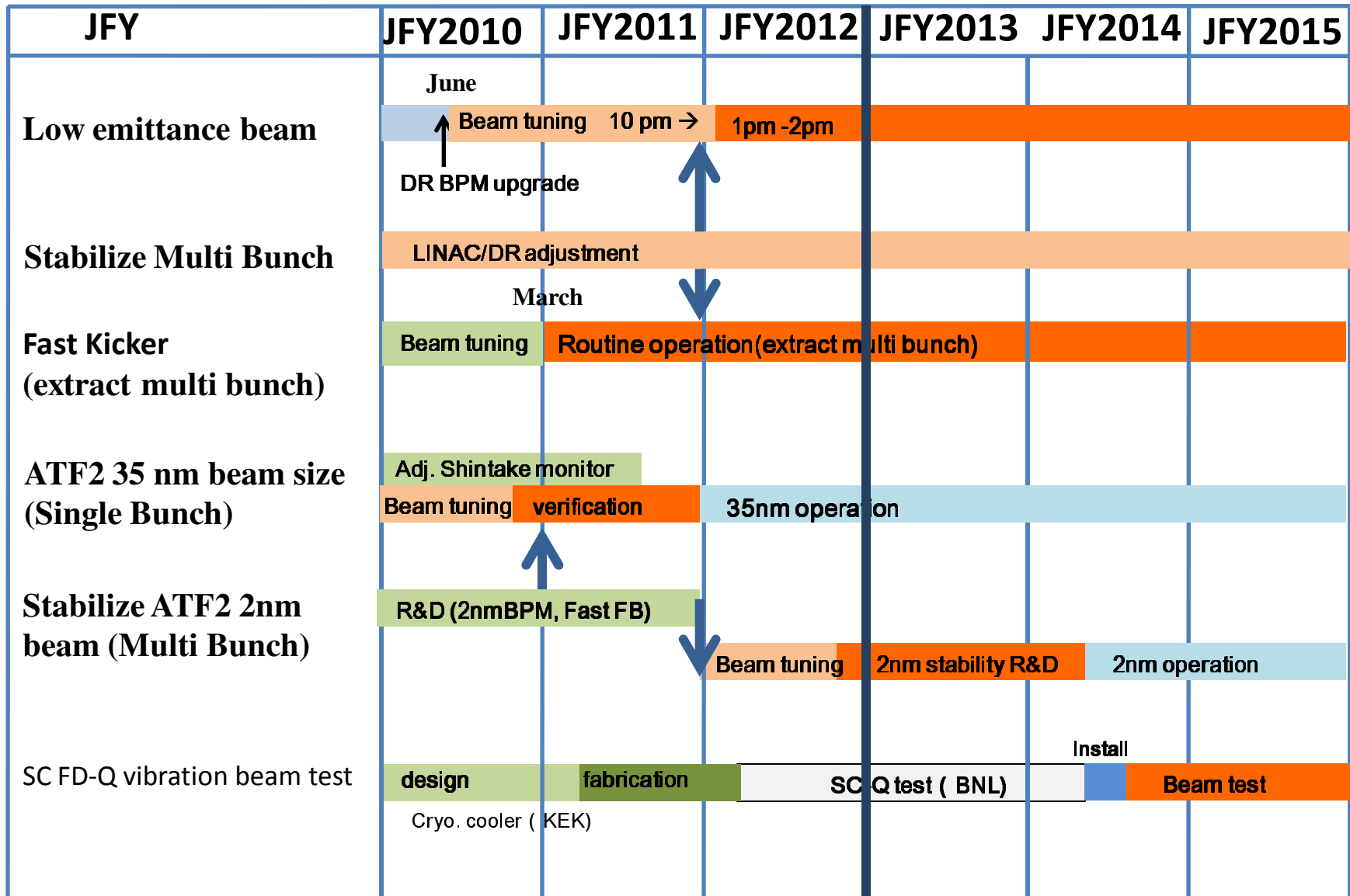


ATF/ATF2 international collaboration by March 2013

- Budget request by March 2013 and possible budget situation (very severe)
- ATF Schedule
- Ongoing R&D
- Future R&D Item for ILC

ATF Schedule



Ongoing R&Ds at ATF/ATF2

- **ATF**
- **low emittance beam**
 - Tuning, XSR, SR, Laser wire,...
- **1pm emittance** (DR BPM upgrade,...)
- **Multi-bunch**
 - Instability (Fast Ion,...)
- **Extraction by Fast Kicker**

Others

- Cavity Compton
- SR monitor at EXT
- **ATF2**
- **35 nm beam size**
 - Beam tuning (Optics modeling, Optics test, debugging soft&hard tools,...)
 - Cavity BPM (C&S-band, IP-BPM)
 - Beam-tilt monitor
 - IP-BSM (Shintake monitor)
- **Beam position stabilization (2nm)**
 - Intra-train feedback (FONT)
 - feed-forward DR->ATF2

We also confirmed the dispersion correction of the ATF2 beam line by the beam profile change of the MS1IP wire scanner (Figure 8). The measured size was limited to 1.4um due to the wire size.

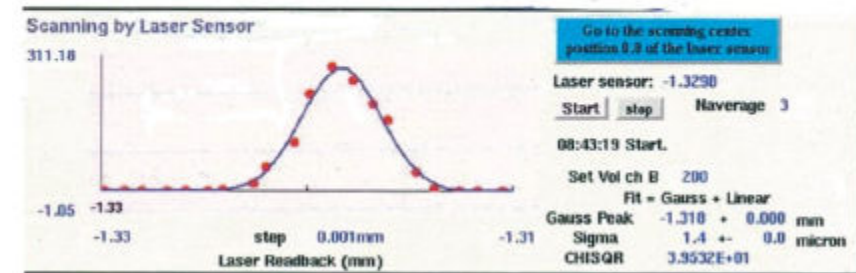


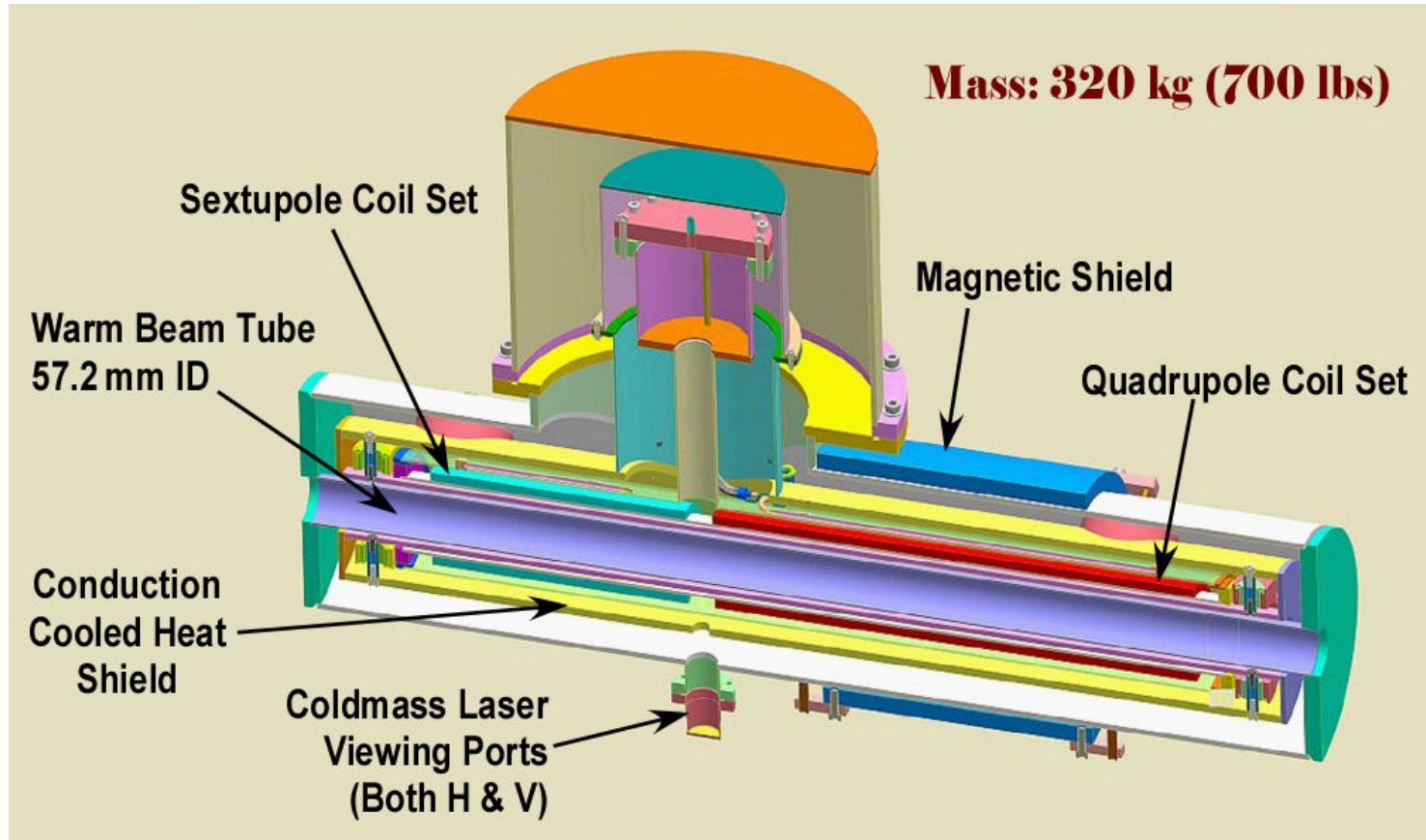
Figure 8 Sample of the vertical beam size measurement

Efficient R&D ← Stabilization of LINAC/DR

Others

- Pulsed 1um Laser Wire
- Cold BPM
- Liquid Pb target
- **Permanent FD Q**
- **SC Final doublet Q/Sx**

Superconducting Final Focusing Magnet



0.77 Oku-Yen