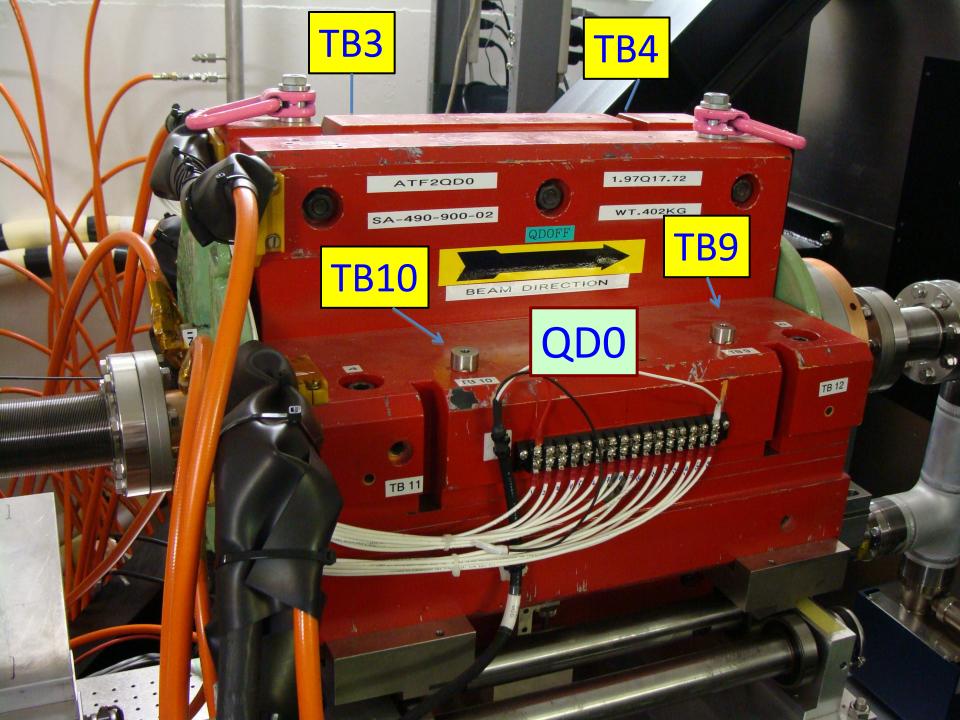
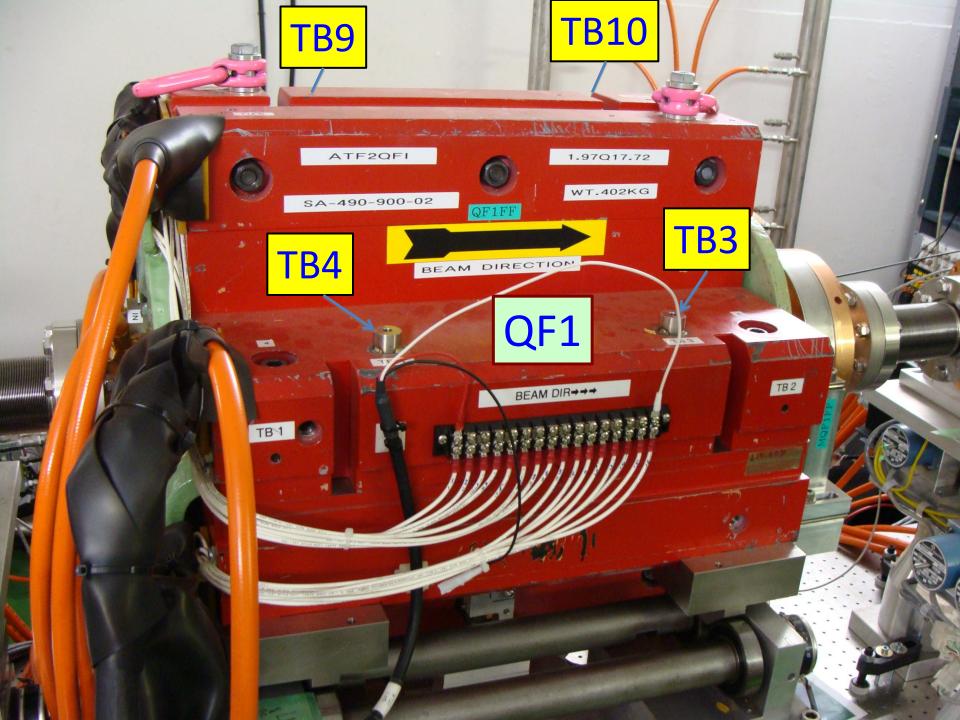
Alignment of QF1

R. Sugahara

10th ATF2 Project Meeting

June 30 – July 2, 2010





	Holder #		Y (mm)	Z (mm)	Dist. From C	Z_aver
old	TB01	250.954	-186.758	41.709		
QF1FF	TB02	250.907	187.011	41.749		
	TB03	181.793	105.953	130.497	181.405	130.474
	TB04	181.017	-105.440	130.450		
	TB05	38.567	-186.873	250.541		
	TB06	38.555	186.894	250.583		
	TB07	-42.031	186.886	250.564	ļ	
	TB08	-42.013	-186.858	250.662	400.040	100.005
	TB09	-182.741	-105.875	128.092	-182.619	128.065
	TB10	-182.497	105.872	128.038		
	TB11 TB12	-250.903 -250.809	186.812 -186.897	38.963 38.909		
	IDIZ	-230.009	-100.097	30.909	Roll (mrad)	6.617
					rton (initial)	
new	TB3	182.777	105.953	129.116	182.389	129.095
QF1FF	TB4	182.000	-105.440	129.074		
by G.G.	TB9	-181.765	-105.875	129.474	-181.644	129.446
-	TB10	-181.522	105.872	129.417	1	
	the curre	ent status	(TB9 side i		by 0.35mm)	
	the curre		(TB9 side i		by 0.35mm)	
	the curre	ent status	(TB9 side i		by 0.35mm)	
* Modif Calc.	the curre ied by G TB01	ent status .G. on 2009	(TB9 side i 90904	s higher	by 0.35mm)	
* Modif Calc.	the curre ied by G TB01	ent status .G. on 2009 251.225	(TB9 side i 90904 -186.758	s higher 40.046	by 0.35mm) 182.265	129.270
* Modif	the curre ied by G TB01 TB02 TB03	ent status .G. on 2009 251.225 251.178 182.653	(TB9 side i 90904 -186.758 187.011 105.953	s higher 40.046 40.088 129.291		129.270
* Modif Calc.	the curre ied by G TB01 TB02 TB03 TB04	ent status .G. on 2009 251.225 251.178 182.653 181.876	(TB9 side i 0904 -186.758 187.011 105.953 -105.440	s higher 40.046 40.088 129.291 129.249		129.270
* Modif Calc.	the curre ied by G TB01 TB02 TB03 TB04 TB05	ent status .G. on 2009 251.225 251.178 182.653 181.876 40.225	(TB9 side i 0904 -186.758 187.011 105.953 -105.440 -186.873	s higher 40.046 40.088 129.291 129.249 250.280		129.270
* Modif Calc.	the curre ied by G TB01 TB02 TB03 TB04 TB05 TB06	ent status .G. on 2009 251.225 251.178 182.653 181.876 40.225 40.213	(TB9 side i 0904 -186.758 187.011 105.953 -105.440 -186.873 186.894	s higher 40.046 40.088 129.291 129.249 250.280 250.322		129.270
* Modif Calc.	the curre ied by G TB01 TB02 TB03 TB04 TB05 TB06 TB07	ent status .G. on 2009 251.225 251.178 182.653 181.876 40.225 40.213 -40.372	(TB9 side i 0904 -186.758 187.011 105.953 -105.440 -186.873 186.894 186.886	s higher 40.046 40.088 129.291 129.249 250.280 250.322 250.837		129.270
* Modif Calc.	the curre ied by G TB01 TB02 TB03 TB04 TB05 TB06 TB07 TB08	ent status .G. on 2009 251.225 251.178 182.653 181.876 40.225 40.213 -40.372 -40.352	(TB9 side i 0904 -186.758 187.011 105.953 -105.440 -186.873 186.894 186.886 -186.858	s higher 40.046 40.088 129.291 129.249 250.280 250.322 250.837 250.934	182.265	
* Modif Calc.	the curre ied by G TB01 TB02 TB03 TB04 TB05 TB06 TB07 TB08 TB09	ent status .G. on 2009 251.225 251.178 182.653 181.876 40.225 40.213 -40.372 -40.352 -181.889	(TB9 side i 0904 -186.758 187.011 105.953 -105.440 -186.873 186.894 186.886 -186.858 -105.875	s higher 40.046 40.088 129.291 129.249 250.280 250.322 250.837 250.934 129.299		129.270
* Modif Calc.	the curre ied by G TB01 TB02 TB03 TB04 TB05 TB06 TB07 TB08 TB09 TB10	ent status .G. on 2009 251.225 251.178 182.653 181.876 40.225 40.213 -40.372 -40.352 -181.889 -181.646	(TB9 side i 0904 -186.758 187.011 105.953 -105.440 -186.873 186.894 186.886 -186.858 -105.875 105.875	s higher 40.046 40.088 129.291 129.249 250.280 250.322 250.837 250.934 129.299 129.243	182.265	
* Modif Calc.	the curre ied by G TB01 TB02 TB03 TB04 TB05 TB06 TB07 TB08 TB09 TB10 TB11	ent status .G. on 2009 251.225 251.178 182.653 181.876 40.225 40.213 -40.372 -40.352 -181.889 -181.646 -250.640	(TB9 side i 0904 -186.758 187.011 105.953 -105.440 -186.873 186.894 186.886 -186.858 -186.858 -105.875 105.872 186.812	s higher 40.046 40.088 129.291 129.249 250.322 250.322 250.337 250.934 129.299 129.243 40.623	182.265	
* Modif Calc. by R.S.	the curre ied by G TB01 TB02 TB03 TB04 TB05 TB06 TB07 TB08 TB07 TB08 TB09 TB10 TB11 TB12	ent status .G. on 2009 251.225 251.178 182.653 181.876 40.225 40.213 -40.372 -40.352 -181.889 -181.646	(TB9 side i 09904 -186.758 187.011 105.953 -105.440 -186.873 186.894 186.886 -186.858 -105.875 105.872 186.812 -186.897	s higher 40.046 40.088 129.291 129.249 250.280 250.322 250.837 250.934 129.299 129.243	182.265	129.270

There was a problem in fiducialization table for QF1 at the time of alignment performed last summer.

According to the original SLAC fiducialization table, we have to rotate QF1 by +6.6 mrad from the mechanical level, which looked strange both for SLAC and KEK alignment people.

As a result, KEK adjusted the QF1 to be mechanically level last summer.

But in the beam tuning, they had to rotate the QF1 by +5.6 mrad (max. value of cam movers), and they needed to rotate more.

Although we do not know why, the original SLAC fiducialization table looks correct.

→Should we adjust the alignment of QF1 following the original SLAC fiducialization Table?