



Collimation Readiness for Stable Beams

Frederik Van der Veken *on behalf of the collimation team*

MPP #246 05/04/2024

TCLs

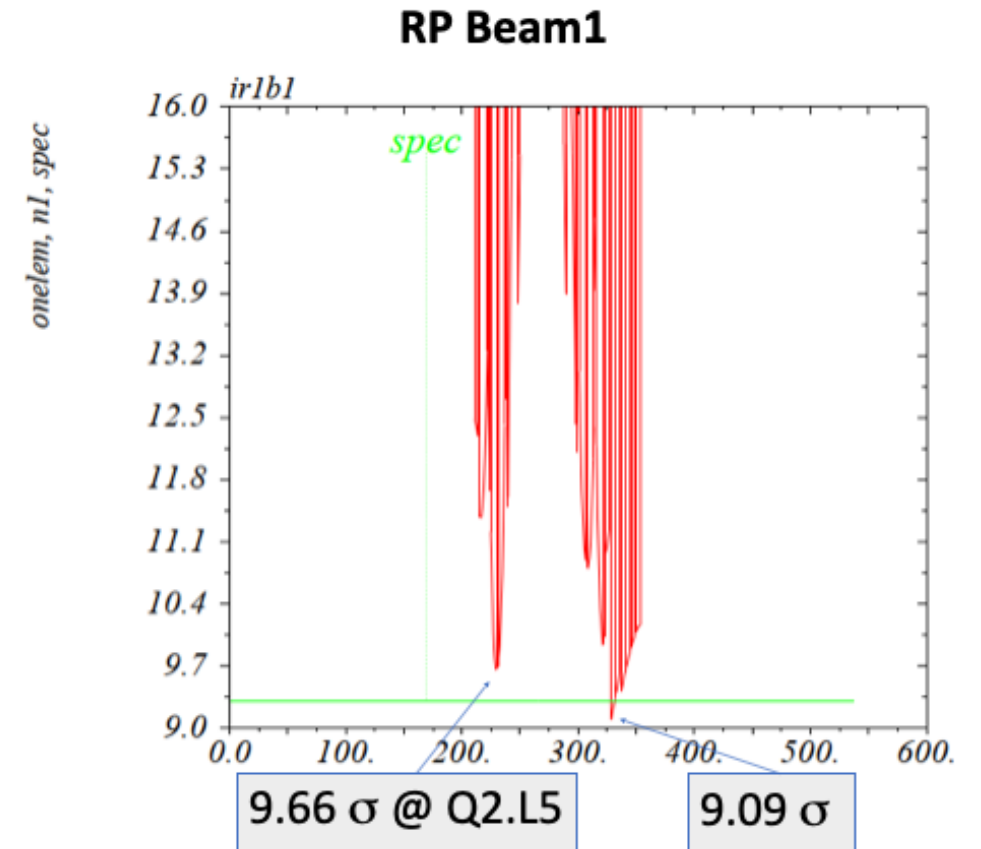
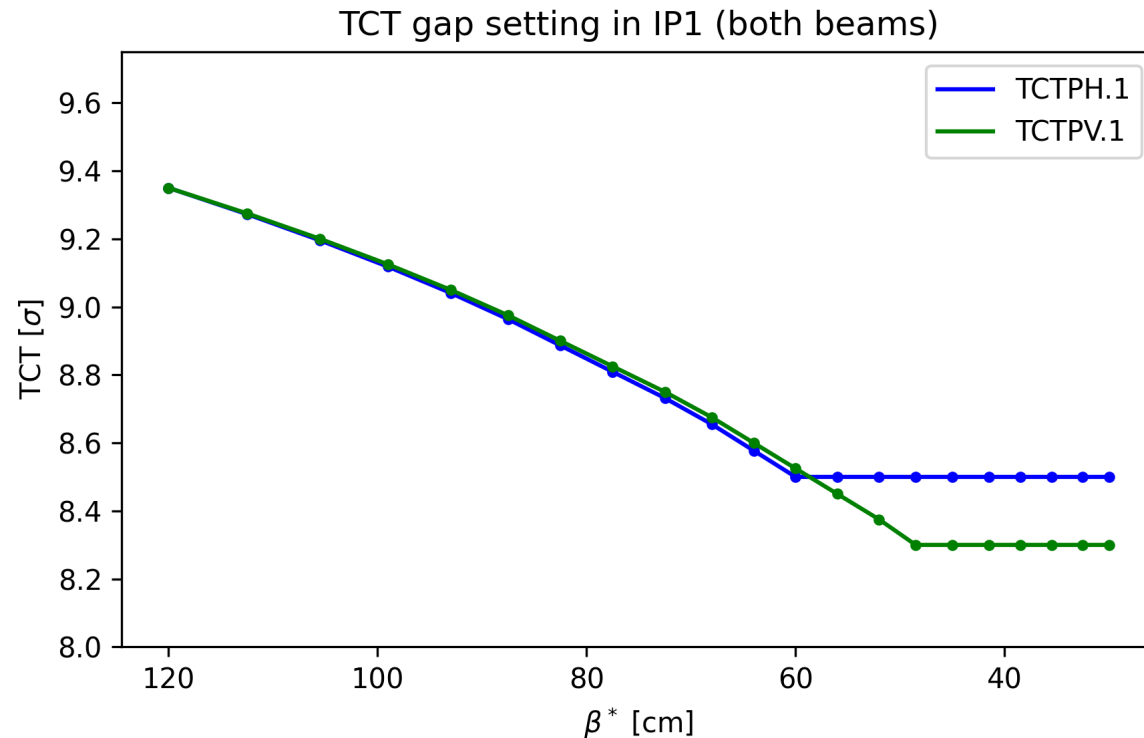
- **Background for FASER doubled wrt. last year**
- **but almost not influenced by TCL6 opening**

- **TCL6 opening at 1.62mm constant**

- **TCL4 and TCL5 more open in IP1 to accomodate AFP**

Aperture Bottleneck in D1.R1 (B1) and D1.L1(B2)

- Aperture bottleneck at 9σ in D1 confirmed by aperture measurement
- TCT at 8.3σ , crossing reduced to 150 μ rad



(courtesy of S. Fartoukh)

Collimator Settings

		IR7 [σ]			IR3 [σ]			Dump [σ]		TCT [σ]				TCL [σ]						
		TCP	TCSG	TCLA	TCP	TCSG	TCLA	TCDQ	TCSP	IP1		IP2	IP5	IP8	IP1			IP5		
										H	V				4	5	6	4	5	6
Injection		5.7	6.7	10	8	9.3	12	8	7.5	13	13	13	13	-	-	-	-	-	-	
Ramp		↓	↓	10	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	-	-	-	-	-	
Flat Top		5	6.5	10	15	18	20	7.3	7.3	18	37	18	18	-	-	-	-	-	-	
Squeeze		5	6.5	10	15	18	20	7.3	7.3	↓	37	↓	↓	-	-	-	-	-	-	
Tune Change		5	6.5	10	15	18	20	7.3	7.3	9.35	37	9.35	11.5	-	-	-	-	-	-	
Adjust		5	6.5	10	15	18	20	7.3	7.3	9.35	37	9.35	11.5	-	-	-	-	-	-	
Levelling	120	5	6.5	10	15	18	20	7.3	7.3	↓	↓	37	↓	11.5	↓	↓	↓	↓	↓	
	60	5	6.5	10	15	18	20	7.3	7.3	8.5	↓	37	8.5	11.5	↓	↓	↓	↓	↓	
	48.5	5	6.5	10	15	18	20	7.3	7.3	8.5	8.3	37	8.5	11.5	↓	↓	↓	↓	↓	
	30	5	6.5	10	15	18	20	7.3	7.3	8.5	8.3	37	8.5	11.5	22	46	26.2 (B1) 27.2 (B2)	17	42	30



home.cern