### Wednesday 16 June

07:00 - 9:00 : Access for world FIP repeater problem on 60A correctors in S78

During the day: preparing the beams for the collimator setup at 3.5 TeV

First attempt: beams were dumped during the ramp (5 mn after the start of the ramp for B2 and 27mn for B1).

Reason: the continuous tune viewer front end on stopped and then the QFB did not have refreshed data to correct on. After some time the beam had drifted sufficiently to trigger a beam dump.

18:15 : Collimator setting-up started

### Wednesday 16 June

<u>Summary of Collimation setup</u> (Ralph Assmann, Roderik Bruce, Daniel Wollmann)

- 1) Finished the setup of Collimators at 3.5TeV (seperation on, no squeeze), i.e. missing vertical secondary collimator in B2 was setup
- 2) In addition we re-checked 2 TCLAs and one TCSG in B1, where we had found up to a factor of two bigger beam sizes than expected. As we were operating at about 5sigma nominal beam size, the results improved but are still bigger than expected. This has to be analysed and understood in detail later.
- 3) During the squeeze (at 7m) we moved in the TCTs as protection for the triplets (to settings equivalent to 15sigma nominal halfgap at 3.5TeV). As expected no losses were seen.
- 4) Due to the beam dump directly after reaching beta\*=3.5m (induced by the trip of the ALICE dipole) the TCTs could not be setup with squeezed beam.

## Wednesday 16 to Thursday 17 June

21:00 - ALICE dipole tripped: investigation - fixing the problem took few hours. Continue without the ALICE magnets for the longitudinal emittance blow up studies

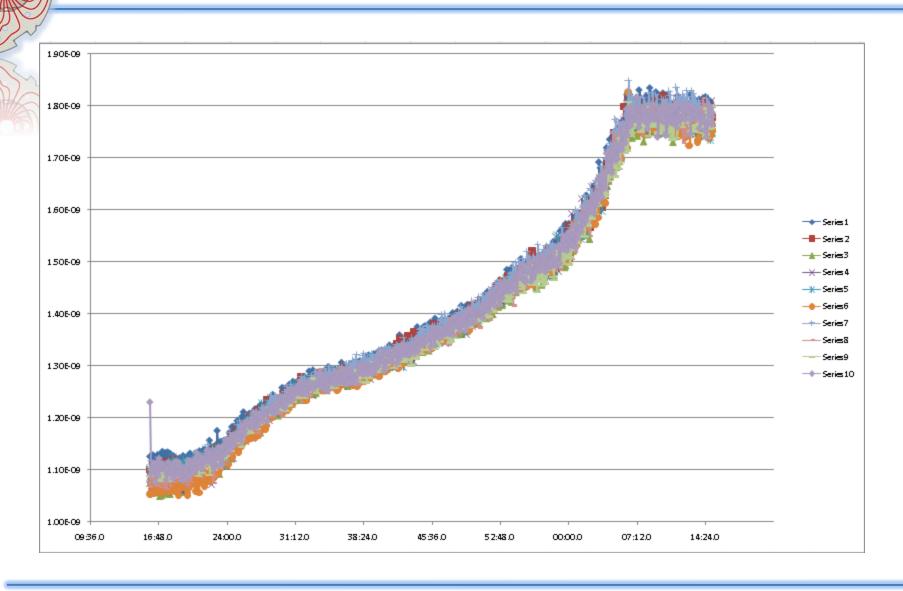
• 3:30: Thunderstorm: lost 2 sectors: 5-6 and 6-7 due to the RQ10.R5, RQ10.L6 and RQ10.R6.

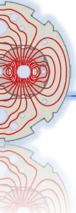
### Wednesday 16 to Thursday 17 June

<u>Summary of longitudinal emittance blow up study</u>: Elena Shaposhnikova, Andy Butterworth and teams

- 10 bunches per beam with 2e10 p/bunch.
- Done without ALICE magnets
- Blow up using 0.4 deg rms noise for 40 minutes from ~1.1 ns to ~1.8 ns.
- The spread in bunch lengths remained constant below 5%, even decreasing slightly
- Unfortunately we were not able to repeat the procedure with high intensity before the thunderstorm.

# Wednesday 16 to Thursday 17 June





#### What's next?

17	Thur	4:00	4	BEAM PREPARATION: Inject 1e11 + ramp + squeeze to 7m for collimator setting up at 3.5 TeV, with separation on
17	Thur	8:00	8	TCT collimator setting up at 3.5 TeV, squeeze to 7m (then to 3.5 m), with separation ON. Then vernier scan in IP1/5. Then TCTs with separation OFF in IP 1 and 5
17	Thur	16:00	1	TCDQ set-up, 1e11, 3.5 TeV, squeezed at 3.5 m
17	Thur	17:00	2	Combo ramp down
17	Thur	19:00	6	Test run with new collimator settings: Inject 1e11 - ramp - TCDQ set-up>TBC
18	Fri	1:00	2	Collimator qualification at 3.5 TeV, unsqueezed, with separation ON, 1e11/beam