Record target for 2018: one+ day with 1 fb-1.
Optics options - pp

1) **Keep 2017 configuration → 30 cm.**
   - 1b) Adiabatic changes:
     - Insert PLP ramp, merge 30cm squeeze,
     - Potentially extend CRS to 80cm,
     - Integrate the CTPPS bump at 40 cm into squeeze between 1m-40cm.

2) **Extend telescopic index in the squeeze.**
   - CRS → see 1) or 1b)
   - Start TELE squeeze at 50..60..80 cm.

3) **Redesign CRS with TELE squeeze.**
   - To gain margin for higher $I_b$ with more effective octupoles (higher $\beta$ @ MO).

1-3) + squeeze to ~25 cm.

Decouple ion configuration - dedicated setup

**Fast startup baseline**

**Is it worth in 2018?**

**Develop in MD for 2018 post TS2 or Run 3.**

2) And 3) proposals by SF.
Scenario with beta* levelling as ‘option’ to push the luminosity ‘later in the fill’ could be a good compromise.
  – Gain op experience,
  – No critical dependence on the technique – very similar to the introduction of xing levelling.
  – Separation levelling @ 30 cm in case of excessive pile-up / triplet heat load.
Scaling the 2017 start-up assuming the 2017 30cm optics configuration as baseline – removing ‘unnecessary’ activities (not MP !) – yields a 2018 startup time of ~ 2 ½ weeks.

- 2 weeks are too short unless:
  - the machine uptime + activity success are close to 100%,
  - we apply ‘activity cheating’ (move activities into interleaved period at price of more overall setup time).

- Overlaps with Easter & FCC week (do not even dream of attending !).

- Activity scheduling

Minimum time to first stable beams with 3b does not seem to me as a good target. The real goal should be minimum time to SB with >= 1500b.