

Beam readiness dates after LS2

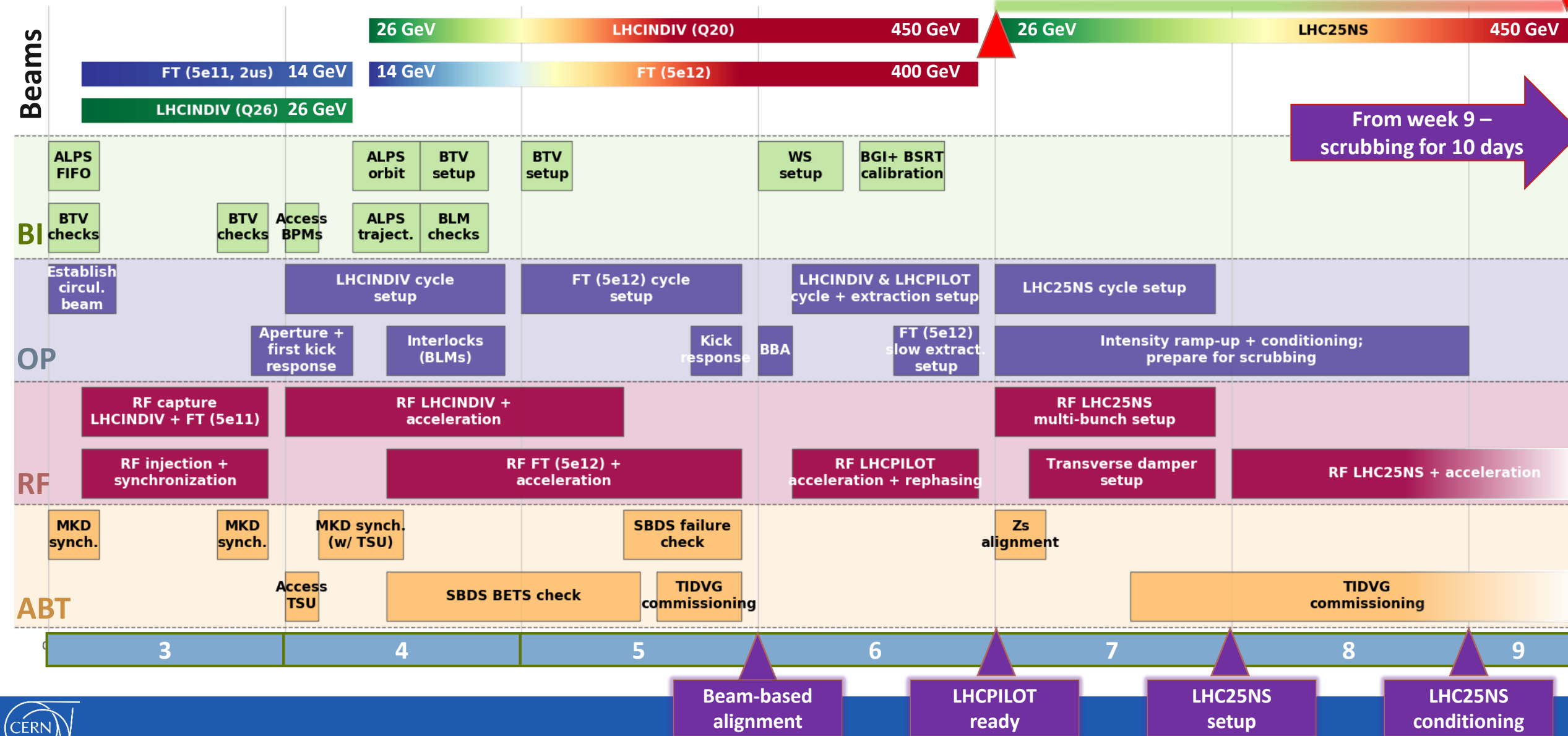
Kevin Li for the SPS BHC Team

SPS Beam and Hardware Commissioning Meeting

09. July 2019

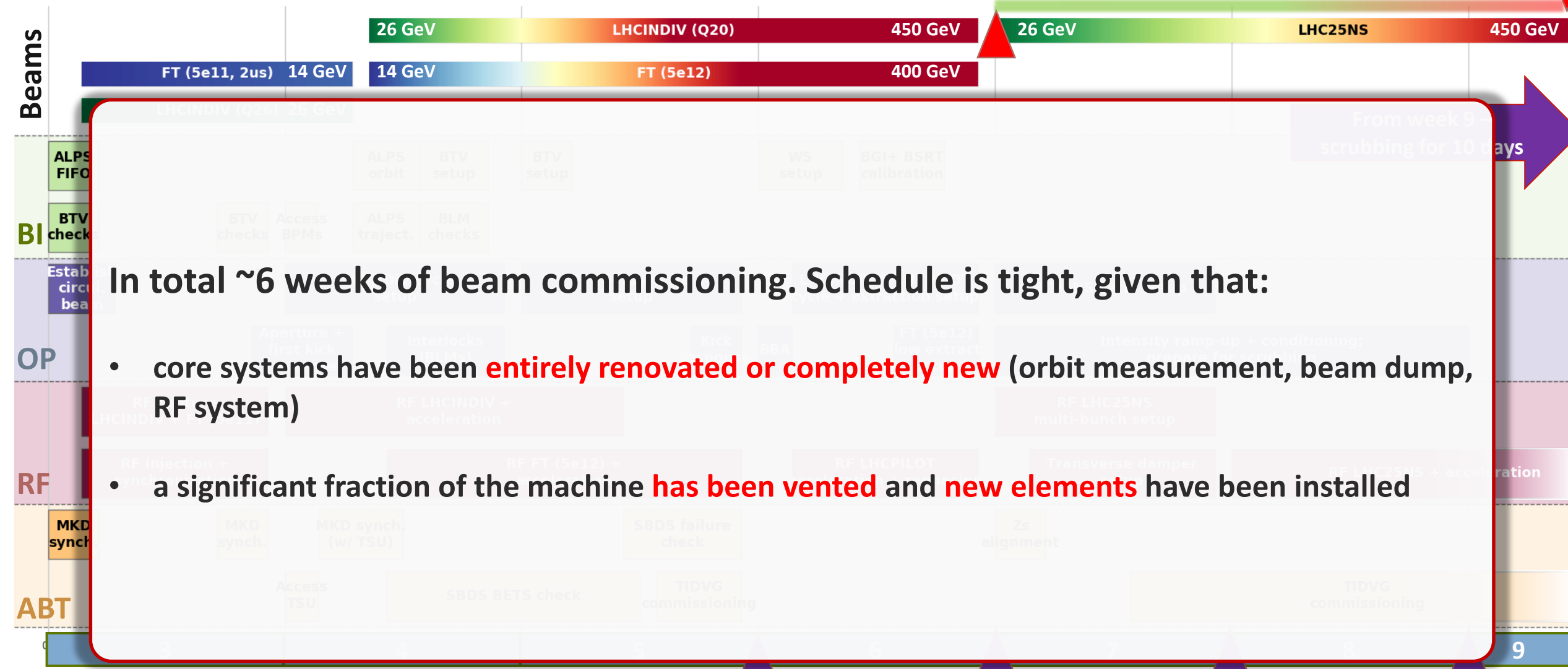
Schedule as shown at the LIU Workshop in February

LHC25NS beam
+ IC
07/09/2021



Schedule as shown at the LIU Workshop in February

LHC PROBE beam available for LHC Week 9
04/03/2021




In total ~6 weeks of beam commissioning. Schedule is tight, given that:

- core systems have been **entirely renovated or completely new** (orbit measurement, beam dump, RF system)
- a significant fraction of the machine **has been vented** and **new elements** have been installed



Planning for beam delivery dates

 Beam commissioning – new machine with LIU upgrades; very little margin

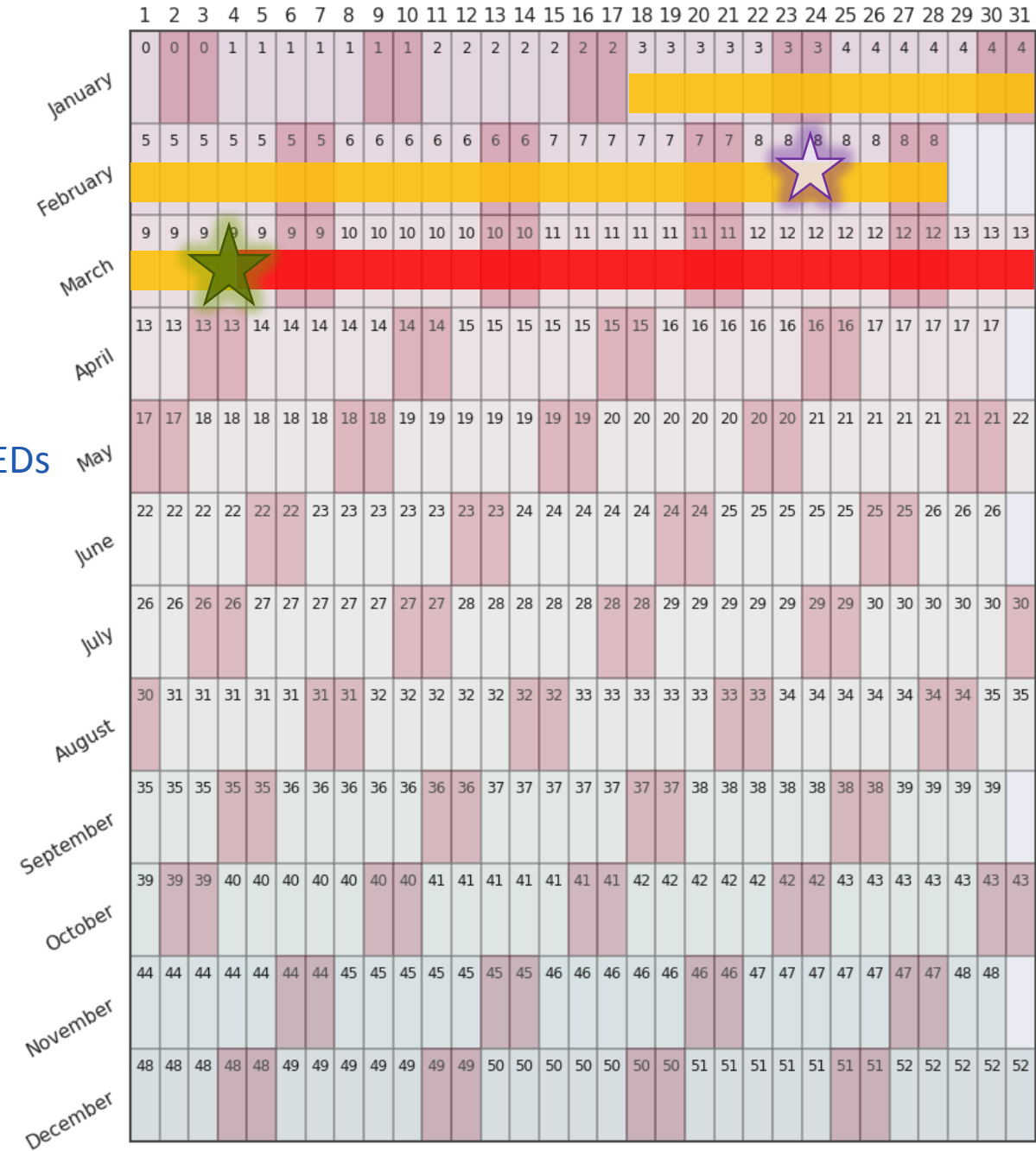
 Conditioning – vacuum, new machine element; scrubbing run and intensity ramp up. In parallel, setup and tuning of LHC beams.



Delivery of FT to TEDs




Delivery of LHC PILOT




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 LHC Proton run

 LHC Ion run

 Delivery of LHC PILOT

 Delivery of FT physics

 Start of MDs

 Commissioning of ions (**dedicated slots!**)

 Commissioning of slip stacking (**MDs needed – priority!**)



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Easter vacation




Steering to targets




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Steering to targets



Beam readiness dates – tentatively

- Start beam commissioning 18.01.2021
- LHC PILOT → 04.03.2021
- FT on TEDs → ~24.02.2021 (sporadically possible)
- FT steering to targets → 06.04.2021
- FT Physics → 19.04.2021 (essentially a week later than 2018)

- AWAKE → after start of FT physics (19.04.2021)
- HiRadMat → after start of FT physics (19.04.2021)

- FT ions...?!

