## HL-LHC-UK Pre-series cryomodule kick off

Wrap Up

## STFC constraints

- Must deliver a pre-series cryomodule
- Can be either RFD or DQW (Can update DQW SPS for PS or do a combined SPS/PS RFD)
- STFC part of funding must be spent by end March 2020, CERN funding can be extended. Deliverables can be extended if it doesn't cost STFC money
- SPS design was not originally part of plan
- Milestone PS design review
- Deliverable PS Design + PS acceptance
- Need to do project management plan update in August for Oversight Committee
  - Gantt, D&M, Risk, Cost, Resources

## Workplan

- Work on SPS till March 2017
- Check DL Infrastructure compatibility
- Undertake a design review if RFD SPS and PS cryomdules can be combined till Dec 2017 (also cavity design update)
- In Jan 2018 Decision on if UK builds RFD or DQW PS Cryomodule
- PS Design officialy starts Jan 2018
- Procurement starts mid 2018 with preliminary review
- Design review in Dec 2018
- Tooling available by June 2019
- Dressed Cavities provided in Sept 2019 (assume CERN production, LARP production would be a bonus)
- CM complete in April 2020 (FPC will be mounted at DL)

## Other issues

- DL technicians could be involved in SPS cryomodule assembly
- For SPS we will help with manufacture of warm shields and clean room tooling
- Can get additional design support from Tom but we will spend technician effort so may be short at the end, as SPS design was originally assumed to be complete by now
- Tom will approve DL drawings informally then will go through proper CERN control system.
- Include in planning what if cavities arrive early or late
- Active alignment will be in PS if required (will know after SPS test)
- Project complete with manufacture, any testing and commissioning will have to follow in next phase.
- No vertical testing planned (may be possible in emergency), we will do FPC and string assembly.