

# Machine Detector Interface – Proposal for 5<sup>th</sup> Physics workshop, February 2022, Liverpool

## ***Selection of MDI Topics:***

- Engineering mechanical model, starting from beam pipe design, supports and anchorage points on detectors, integration
- Beam backgrounds, beam losses and radiation. This topic includes masking and shielding, tail collimation, neutron radiation in the IR area
- Luminosity calorimeter
- Fast luminosity monitor for machine tuning during commissioning
- Beamstrahlung monitor

## *Proposal for one parallel session:*

- Progress on the engineering mechanical model
- Progress on the beam background simulations
- Progress on the synchrotron radiation simulation
- Luminosity monitor

## *Possible Plenary talks related to MDI:*

- FCC-ee Optics update (4IP option vs 2IP, collimation scheme)
- MDI session summary talk