

# *Activities for upgrades and Future Colliders @ Torino*

*towards the European Strategy for Particle Physics Update @ 2025-26*

***Cecilia Borca***

- LHC-CMS Phase 2 upgrade on-going: silicon tracker, ECAL, MDT, DT, PPS
- LHC-ALICE upgrade for LS4: mainly ITK
- EIC-EPIC new development on-going
- RD\_MUCOL (also UE-MUCOL)
- RD\_FCC
- DRD: detector R&D – synergies in CSN1-2-3 and CSN5 (LGAD, MAPS, electronics)

## **LGAD**

- |                |              |
|----------------|--------------|
| ▷ 4DSHARE      | – CSN5       |
| ▷ 4D-Share     | – PRIN 2022  |
| ▷ eXFlu-innova | – AIDAInnova |
| ▷ ComplexX     | – ERC COG    |



# Attività FCC– sviluppi 2025

- **Rivelatore IDEA** CDR 2019
  - ➔ ARCADIA FD-MAPS for Vertex and OT  
sinergia con ALICE-3
  - ➔ uRWELL & TIGER for muon systems  
sinergia con BESIII

# Attività EIC-EPIC – sviluppi 2025

- **Rivelatore EPIC**
  - ➔ d-RICH – rivelatore per PID – contributo INFN  
*R&D su SiPM*
  - ➔ dRICH @Torino: ALCOR ASIC – lettura SiPM  
*ALCOR FE ASIC - sinergia con DARKSIDE*

