

# A Dark Matter Technology Network (DMTechNet)

## The idea

### Dark Matter:

- Next-generation experiments often beyond capabilities of a single lab
  - Many common interests: beams, magnets, RF, cavities, cryo, detectors, underground infrastructures, software, data,...
  - Facilities (not an exhaustive list):
    - underground facilities at Boulby, Gran Sasso, Modane, ...
    - beamlines at CERN, Bonn, Frascati, DESY, ...;
    - magnets and RF at CERN, DESY, IJCLab, ....;
    - Detector developments: every HEP lab 😊
  - Technologies developed in collider-based experiments (**intense beams, RF, detectors**) complement the APPEC activities
- ➔ This calls for a combined action to further dark matter research in Europe complementary to iDMEu and the DRDs

### Proposal: Form a “Dark Matter Technology Network”

- Improved flow of information on expertise, on infrastructures and facilities, and on their planning;
- Set up of the necessary communication structures, collaborative tools software infrastructure (a la HEPSPF-KEY4HEP for colliders);
- Expertise and support in the respective fields (detectors, RF, magnets, ....)
- Access to the relevant infrastructures and facilities
- Prepare grounds for common future funding applications on the European level with the aim of setting up new experiments and necessary infrastructures
- Supported by the EPPSU output 😊

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