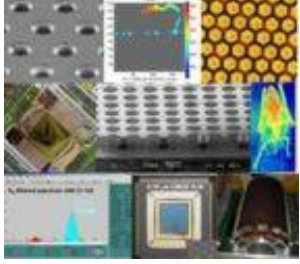


MPGD Distributed Infrastructure

- **The idea:**
 - The infrastructures supporting MPGD developments are several, even if CERN has played and is playing a major role
- **The proposed scheme for a distributed infrastructure (preliminary):**
 - CERN + INFN cluster + CEA
 - **formula:**
 - support for infrastructure reinforcement and maintaining
 - transnational access to the infrastructures



Distributed Infrastructure - INFN cluster

PRELIMINARY

where	expersize	people	activity track	characterising facilities
BARI	Electronics Research Unit: design and implementation of integrated low-noise front-end electronics in BiCMOS and CMOS technology for different types of particle detectors (drift chambers, RPC, GEM, silicon pixel and strip detectors)	4 senior researchers , 2 PhD students and postdocs, 2 Technicians	electronics for the experiments ALICE, CMS, Kloe2; other construction contributions to the experiments :ALEPH, KLOE, ALICE and CMS	“state of arts” CAD system (Cadence, Synopsys, Mentor Graphics, Xilinx) ; 50m ² laboratory with a design area and welding station and a machine for the re-work of BGA components (ERSA-IR550A, PL550A); X-ray inspection (XD7600NT) machine; support of the technical servises at INFN-Bari (Mechanical workshop, electronics laboratoty)
LN (Frascati)	gas detectors: streamer tubes;proportional tube; glass-RPCs; drift chambers; MPGD: GEM in particular	3 senior researchers ; 2 PhD students and postdocs; 1 mechanical engineeri; 3-4 technicians.	Introduction of the stretching concept in GEM detectors; realization of fast planar GEMs for LHCb muon detector; realization of the first cylindrical GEM counter; Gaseous Detetcors for large experiments such as ALEPH (Hadron calorimeter with streamer trubes), KLOE (Large Drift Chamber)	gas detector laboratory with X-ray tube station and cosmic ray stand facility;permanent tracking set-up at LNF Beam Test Facility (BTF); large clean area (150m ²); support of the LNF resources; mechanical workshop, mechanical design service, laser tracking station for metrology, electronics workshop.
TRIESTE	gas detectors (MWPCs, LSTs), RICH detectors, gas photon detectors, MPGD: THGEM in particular	3 senior researchers , 2-3 PhD students and postdocs, 2 units of dedicated technicians, 2 FTE equivalent units of technicians	7 years activity in MPGD R&D, photon detectors THGEM-based and hybrid (THGEM + micromegas); construction of hybrid photon detectors for COMPASS RICH-1	60 m ² laboratory with complete standard equipment, gas detector dedicated equipment, MPGD dedicated equipment with unique facility for THGEM polishing and quality control; z-ray tube station; support of the INFN-Trieste mechanical workshop, electronic laboratory; computing resources also available