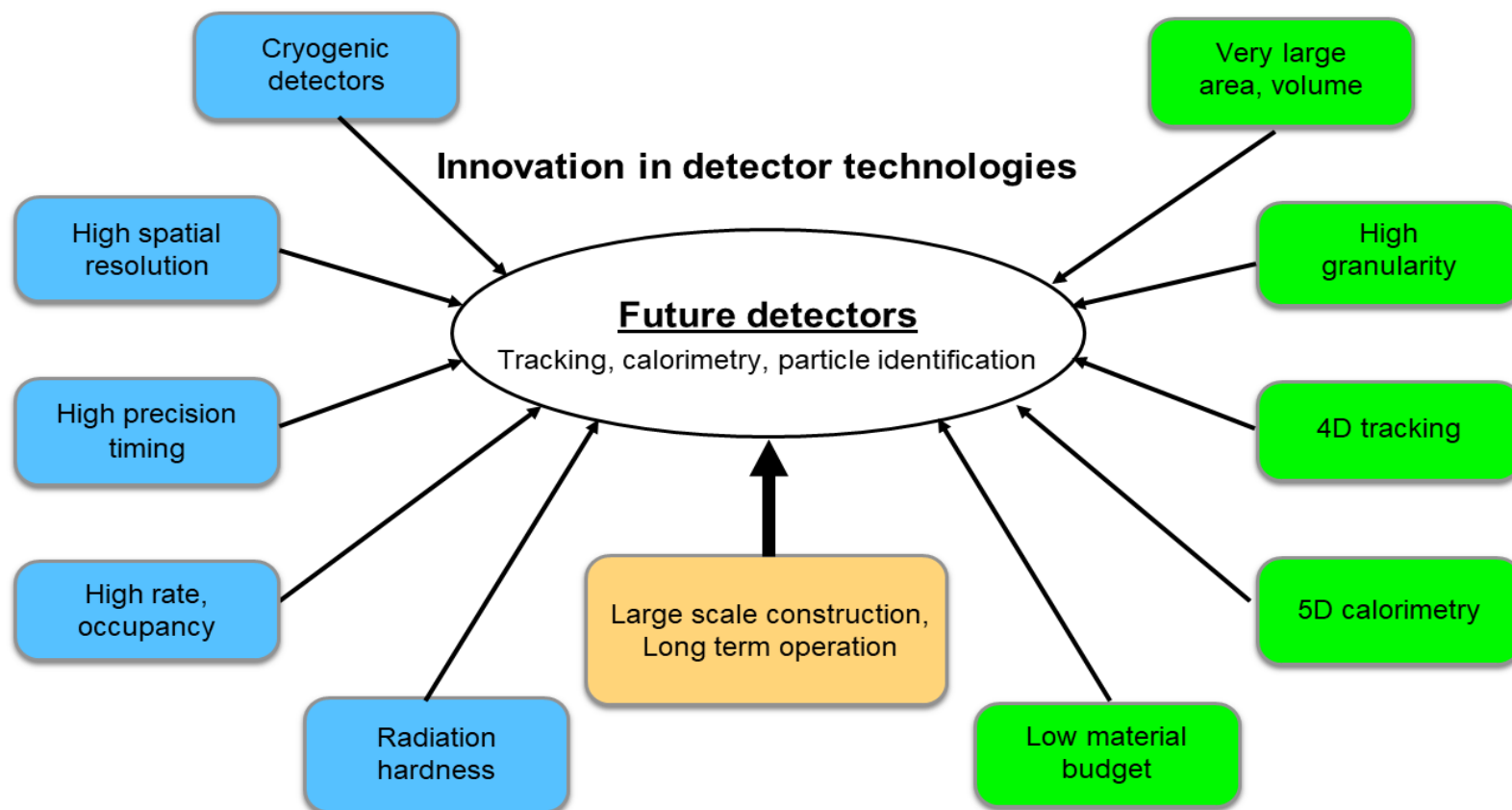


EU_AIDA-Innova (2021-2025) : Iniziata il 1/04/2021

Rapp. Locale e membro del Govern. Board (M.G. Catanesi)



INFN @ WP

BENEFICIARI

WP		Industries	INFN
3	beam telescopes + DAQ @ CERN & DESY		
4	irradiation/EMC, characterization facilities	CAEN	<i>ENEA-FNG irradiation</i>
5	Depleted Monolithic Active Pixel Sensors		PI, TO, MI, PV, CA
6	hybrid silicon pixel including timing (4D)	FBK	CA, GE, PG, TN, TO
7	new gas detector MPGD, RPC, TPC	CAEN ELTOS	BA, BO, LE, LNF, PV, RM3, TS
8	calorimeters and particle ID detectors	CAEN FBK	BO, LNF, NA, PD, PG, PV, TO <i>Glass2Power</i>
9	cryogenic neutrino detectors: LAr TPC		MIB
10	advanced mechanics for ultra-light Sidetector		PI, PG
11	microelectronics: ASIC design		BA, BO, PV, TO
12	software/reco: Turnkey Software Stack		FE, PD, PI
13	prospective and technology-driven R&D		

BARI: WP7 e WP11 : circa 100.000 Euro

Objectives

Task 7.1. Coordination and Communication

See introductory section on page 29.

Task 7.2. Multigap RPCs (MRPCs) for fast timing and Eco-friendly gas mixtures for RPCs

- Developing and testing material (thin plates of low resistivity glass)
- Construction, characterisation and test beam of small-size prototypes
- Construction of $1 \times 1 \text{ m}^2$ prototypes with the new readout plane structure for a semi-digital hadron calorimeter (SDHCAL)
- Test beam study of the shower time development in an SDHCAL, equipped with the prototype detectors
- Identification and characterisation of new gas mixture candidates
- Validation of the gas mixtures after large integrated doses at GIF++

Task 7.3. Development of resistive electrodes for MPGDs and Industrial engineering of high-rate μ -RWELL detector

- Production of Diamond Like Carbon (DLC) with ion beam deposition and pulsed laser deposition
- Study of the resistance of graphene to polyimide etching liquids
- Characterisation of $10 \times 10 \text{ cm}^2$ foils by DLC and graphene
- Industrial production of small-size prototypes and their characterisation
- Industrial production of large-size prototypes ($\sim 0.5 \text{ m}^2$) and their characterisation

Task 7.4. A 4-channel electronic board prototype for cluster counting and Hybrid readout for high pressure gas TPC for neutrino physics

- Design electronics and realise a 4-channel prototype for cluster counting in ultra-light drift chambers
- Identification and characterisation of adequate gasses
- Construction of a small-scale TPC prototype ($\sim 10 \text{ l}$) with a hybrid charge and optical readout

Task 7.5. Photon detectors for hadron particle identification at high momenta

- Development of MPGD single photon detectors for compact Ring Imaging Cherenkov detectors
- Comparison of measured prototype characteristics with Silicon Photomultipliers (SiPMs) and Large Area Picosecond Photodetectors (LAPPDs)

WP7

Personale INFN

UE - AIDAINNOVA

Preventivi 2022 > CSN I > UE - AIDAINNOVA > Bari > Modulo EC/EN 7

Modulo EC/EN 7

A cura di: [Maria Gabriella Catanesi](#)

Ricercatori					
Nome	Età	Contratto	Qualifica	Aff.	%
1 Catanesi Maria Gabriella		Dipendente	Primo Ricercatore	CSN II	10
2 Nappi Eugenio		Dipendente	Dirigente di Ricerca	CSN III	10
3 Pastore Alessandra		Dipendente	Ricercatore	CSN I	10
4 Silvestris Lucia		Dipendente	Primo Ricercatore	CSN I	0
5 Verwilligen Piet Omer J		Dipendente	Ricercatore	CSN I	10
Numero Totale Ricercatori			5	FTE: 0.40	

Tecnologi					
Nome	Età	Contratto	Qualifica	Aff.	%
1 Licciulli Francesco		Dipendente	Tecnologo	CSN II	10
2 Loddo Flavio		Dipendente	Primo Tecnologo	CSN I	10
3 Pastore Cosimo		Dipendente	Tecnologo	CSN III	5
Numero Totale Tecnologi			3	FTE: 0.25	

Tecnici					
Nome	Età	Contratto	Qualifica	Aff.	%
1 Martiradonna Sabino		Dipendente	Collaboratore Tecnico E.R.		10
2 Papagni Giovanni		Dipendente	Collaboratore Tecnico E.R.		10
Numero Totale Tecnici			2	FTE: 0.20	

Annotazioni

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+ 2 Assegni INFN : inizio contratti da programmare

Sigle Collegata

Excel AIDAInnova-Bari  - Saved

 Search (Option + Q)

File Home Insert Draw Page Layout Formulas Data Review View Help  Editing

   Calibri 12 B        General     

C20  

	A	B	C	D	E	F	G	
1	Nominativo	Posizione	esperimento	Percentuale	WP/Task	TimeSheet	WP finanziato a	
2								
3	Catanesi Maria Gabriella	Pr. Ricercatore	RD_MUCOL/RD51	0.1	WP7.4.2	YES	YES	
4	Pastore Cosimo	Tecnologo	T2K	0.05	WP7.4.2	YES	YES	
5	Martiradonna Sabino	Tecnico	Servizi	0.15	WP7.4.2	YES	YES	
6	Nappi Eugenio	Dirigente	EIC_NET	0.1	WP7.5.1	YES	YES	
7	Verwilligen Piet	Ricercatore	CMS_FASE2/RD_MUCOL	0.1	WP3.1	YES	YES	
8	Papagni Giovanni	Tecnico	Servizi	0.1	WP3.1	YES	YES	
9	Loddo Flavio	Primo Tecnologo	CMS_FASE2	0.1	WP11.3	YES	YES	
10	Licciulli Francesco	Tecnologo	CMS_FASE2	0.1	WP11.3	YES	YES	
11	Pastore Alessandra	Ricercatore	LHCB	0.1	W7.2.2	YES	NO	
12	Silvestris Lucia	Priimo Ricercatore	RD_MUCOL	0.05	W.12.1	NO	NO	
13								
14								
15								
16								
17								
18								

Personale Associato (da confermare)

- Gabriella Pugliese (5% sinergia MuCol /CSN1)
- Lorenzo Magaletti (10% sinergia T2K/CSN2)
- Giacomo Volpe (10% sinergia EIC /CSN3)
- Nicola Defilippis (? sinergia FCC/CSN1)

➤ Percentuali : circa 1.2 FTE

➤ Non ci sono richieste finanziarie

➤ Richieste di servizi (sugli esperimenti ?)

➤ Esempio : su T2K abbiamo chiesto

- 1mese OFF. Meccanica e 1 mese CAD : realizzazione vessel TPC alta pressione (laboratorio: AIDAINNOVA)

Spostamento laboratori ?

RD51@BARI

- RD51 studies of MPDG for CMS upgrade
 - CMS Triple-GEM detectors
A.Colaleo, P.Verwilligen, A.Pellecchia, M.Maggi, A.Ranieri, F.Licciulli, F.Simone, R.Venditti, J.Merlin, C.Aruta, A.Stamerra, S.Nuzzo
 - Fast Timing MPGD (FTM)
P.Verwilligen, A.Pellecchia, M.Maggi, A.Ranieri, F.Licciulli, G.DeRobertis, R.Radogna, F.Simone, A. Colaleo, A.Valentini.
- New horizontal TPCs with Resistive MM readout (T2K)
V. Berardi, M.G.Catanesi, L. Magaletti, C. Pastore, E.Radicioni
- **NEW ! (AIDA-Innova selected projects RD51 related)**
 - Task 7.3: Development of resistive electrodes for MPGD : P. Verwilligen et al
 - Task 7.4: High pressure TPC for Neutrino physics: L. Magaletti et al

E. Radicioni : Membro del Management Board di RD51

P. Verwilligen: Convener Simulation WG

Richieste : 6Keuro Missioni su DOT1