

Innovative Research Infrastructure on applied Superconductivity

Call PNRR «Infrastrutture di Ricerca»

Technical Coordinator: Lucio Rossi, Unimi & INFN-Mi

Spokeperson: Pierluigi Campana, INFN

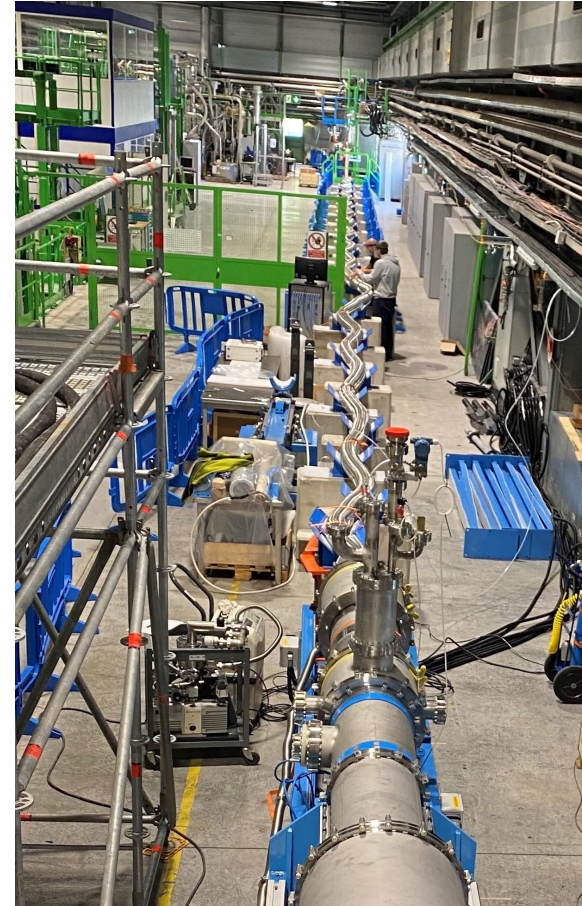


OBIETTIVI

Creazione di una nuova infrastruttura di ricerca distribuita sul territorio per le tecnologie basate sulla superconduttività, tramite il potenziamento di una rete di laboratori

Due dimostratori:

- costruzione di un prototipo di linea elettrica “green”, capace di trasportare 1 GW di potenza senza emissioni
Linea trasporto energia - Transizione energetica
- costruzione di un magnete HTS a basso consumo (sostenibilità) – acceleratori, medicina



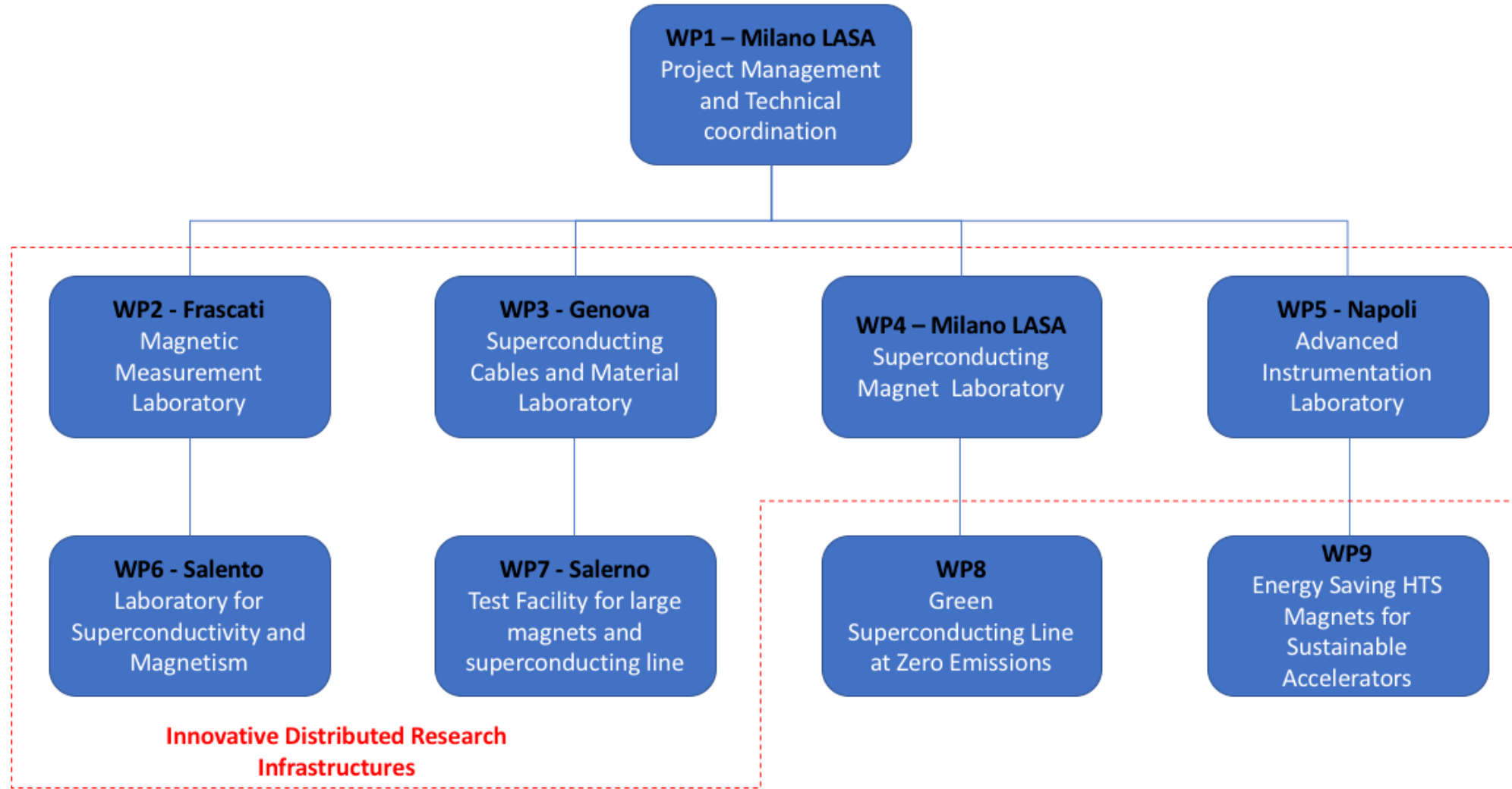
PARTENARIATO E BUDGET



IR	tot rev
INFN	€ 39,572,238.37
SPIN	€ 2,416,027.45
UniGE	€ 1,182,350.94
UniMI	€ 5,532,061.30
UniNA	€ 2,044,395.50
UniSalento	€ 3,605,900.00
UniSA	€ 5,643,994.61
Totale	€ 59,996,968.17

Institutes	WP#	Reported	7%ovhd	TOT.Reimb
INFN	LNF WP2	1,046,760.00 €	73,273.20 €	1,120,033.20 €
INFN	GE WP3	3,211,899.80 €	224,832.99 €	3,436,732.79 €
INFN	MI WP1-4-8-9	25,401,910.34 €	1,778,133.72 €	27,180,044.07 €
INFN	NA-SA WP7	7,322,830.20 €	512,598.11 €	7,835,428.31 €
INFN	TOT	36,983,400.34 €	2,588,838.02 €	39,572,238.37 €
CNR-SPIN	GE WP3	1,090,099.58 €	76,306.97 €	1,166,406.55 €
CNR-SPIN	NA WP5	480,020.00 €	33,601.40 €	513,621.40 €
CNR-SPIN	SA WP7	687,850.00 €	48,149.50 €	735,999.50 €
CNR-SPIN	TOT	2,257,969.58 €	158,057.87 €	2,416,027.45 €
Unige	TOT WP3	1,105,000.88 €	77,350.06 €	1,182,350.94 €
Unimi	TOT WP4-9	5,170,150.75 €	361,910.55 €	5,532,061.30 €
Unina	TOT WP5	1,910,650.00 €	133,745.50 €	2,044,395.50 €
Unisalento	TOT WP6	3,370,000.00 €	235,900.00 €	3,605,900.00 €
Unisa	TOT WP7	5,274,761.32 €	369,233.29 €	5,643,994.61 €
	Grand Tot	56,071,932.87 €	3,925,035.30 €	59,996,968.17 €

ORGANIZZAZIONE



BUDGET PER WP

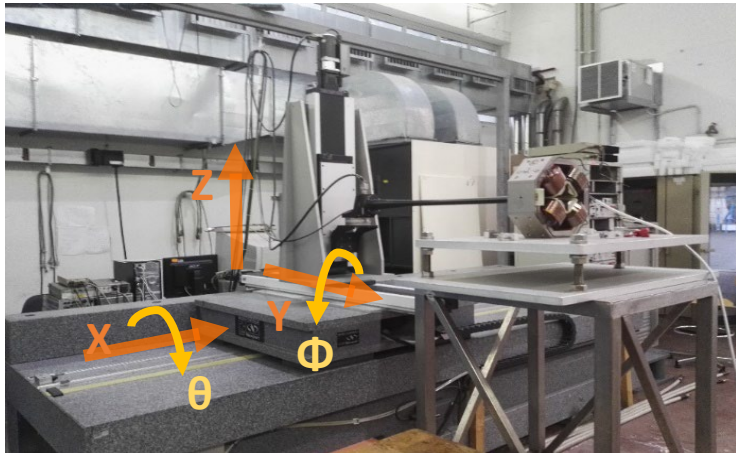


Leader	WP	description	Reported	Indirect costs	Total grant
P. Campana	1	Project Management and Technical Coordination	4,300,009.70 €	301,000.68 €	4,601,010.38 €
L. Rossi	1	INFN-Milano	4,300,009.70 €	301,000.68 €	4,601,010.38 €
L. Sabbatini	2	Innovative distributed R.I. POLO FRASCATI	1,046,760.00 €	73,273.20 €	1,120,033.20 €
L. Sabbatini	2	INFN-LNF	1,046,760.00 €	73,273.20 €	1,120,033.20 €
R. Musenich	3	Innovative distributed R.I. POLO GENOVA	5,407,000.26 €	378,490.02 €	5,785,490.28 €
R. Musenich	3	INFN- Sez. GE	3,211,899.80 €	224,832.99 €	3,436,732.79 €
A. Malagoli	3	SPIN-GE	1,090,099.58 €	76,306.97 €	1,166,406.55 €
M. Putti	3	UNIGE-DIFI	1,105,000.88 €	77,350.06 €	1,182,350.94 €
M. Sorbi	4	Innovative distributed R.I. POLO MILANO (LASA)	8,227,151.08 €	575,900.58 €	8,803,051.65 €
M. Statera	4	INFN-Milano	3,722,000.55 €	260,540.04 €	3,982,540.59 €
M. Sorbi	4	UNIMI-DIFI	4,505,150.53 €	315,360.54 €	4,820,511.07 €
P. Arpaia	5	Innovative distributed R.I. POLO NAPOLI	2,390,670.00 €	167,346.90 €	2,558,016.90 €
F. Miletto	5	SPIN-NA	480,020.00 €	33,601.40 €	513,621.40 €
P. Arpaia	5	UNINA (Federico II) - CIRMIS	1,410,650.00 €	98,745.50 €	1,509,395.50 €
G. Fiorillo	5	UNINA (Federico II) - DIFI	500,000.00 €	35,000.00 €	535,000.00 €
G. Maruccio	6	Innovative distributed R.I. POLO SALENTO	3,370,000.00 €	235,900.00 €	3,605,900.00 €
G. Maruccio	6	UNISALENTO-DMF	3,370,000.00 €	235,900.00 €	3,605,900.00 €
U. Gambardella	7	Innovative distributed R.I. POLO SALERNO	13,285,441.52 €	929,980.91 €	14,215,422.43 €
U. Gambardella	7	INFN-Napoli-GC Salerno	7,322,830.20 €	512,598.11 €	7,835,428.31 €
M. Cuomo	7	SPIN-SA	687,850.00 €	48,149.50 €	735,999.50 €
S. De Pasquale	7	UNISA-DIFI	5,274,761.32 €	369,233.29 €	5,643,994.61 €
L. Rossi	8	Green Superconducting Line at zero emission	11,968,400.10 €	837,788.01 €	12,806,188.10 €
L. Rossi	8	INFN-Milano	11,968,400.10 €	837,788.01 €	12,806,188.10 €
L. Rossi	9	Energy Saving HTS Magnet for Sustainable Accelerators	6,076,500.22 €	425,355.02 €	6,501,855.24 €
L. Rossi	9	INFN-Milano	5,411,500.00 €	378,805.00 €	5,790,305.00 €
L. Rossi	9	UNIMI-DIFI	665,000.22 €	46,550.02 €	711,550.24 €
		TOTAL PROGRAM	56,071,932.87 €	3,925,035.30 €	59,996,968.17 €

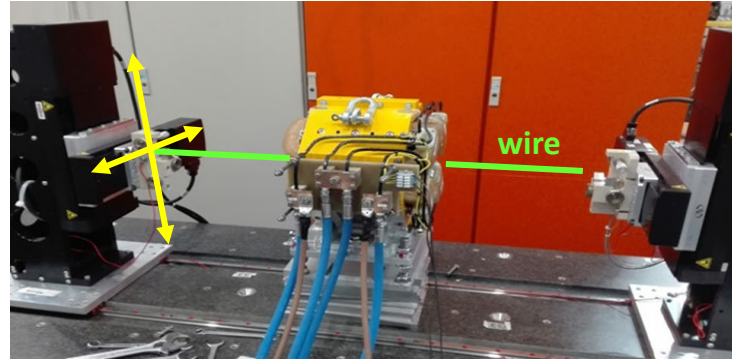
IRIS @ LNF

Acquisto di strumentazione per misure a caldo di bobine e magneti SC

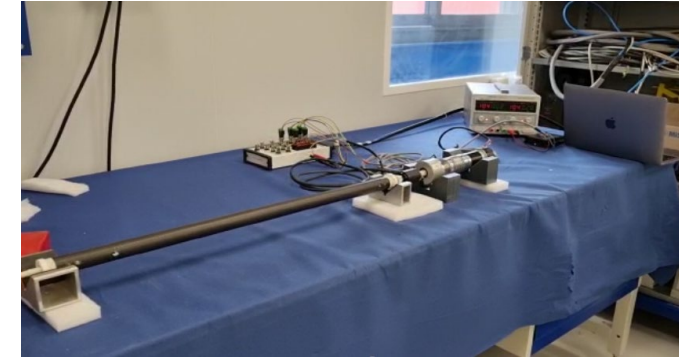
Potenziamento del personale



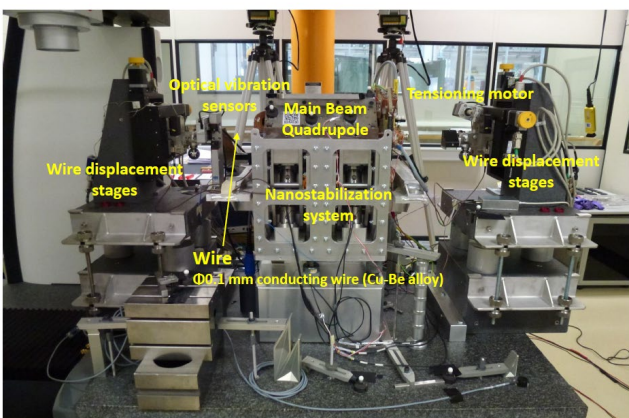
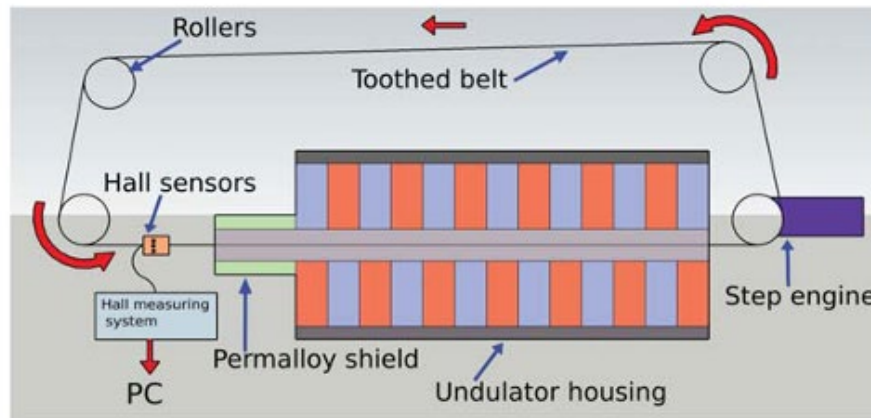
5-axes digital Movement device equipped with Hall Probe



Stretched Wire Measurement Bench



Rotating Coil under test at CERN



BUDGET PER LNF



Spesa	Costo previsto (€)	Note
Coordinatometro	150.000	Ditta di ingegneria?
Pulsed wire bench	100.000	Utile anche per onduttore SABINA & EuPRAXIA Autocostruito o tramite accordo con CERN?
Sonda di Hall a talpa	240.000	Utile anche per onduttore SABINA & EuPRAXIA Autocostruito o fornitore?
Magneti di calibrazione	100.000	Procedura negoziata
Sonde calibrate	40.000	Procedura negoziata
Power supplies	100.000	MEPA
Ancillaries	20.000	MEPA
Tecnologo 12 mesi	56.760	Fisico o ingegnere elettronico
Tecnico 24 mesi	100.000	Perito elettronico
Tecnico 24 mesi	100.000	Perito elettronico
Training	40.000	Partecipazione a corsi, scuole, workshop
Indiretti	73.273	Da rendicontare
TOTALE PER LNF	1.120.033	

COST SCHEDULING

Power supplies

M8: ordine fatto

M20: consegnati e test

Sistema di calibrazione

M10: ordine fatto

M26: consegnato e test

Sistemi di misura

M10: ordine fatto

M30: consegnati ed installati

SQUADRA LNF



Servizio Ingegneria Elettrotecnica DA

L. Sabbatini

A. Vannozzi

F. Iungo

F. Sardone

A. Casamatta

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(no timesheet)