G5 INFN LE preventivi 2014

- DIAPIX
- ELIMED
- NIRFE
- TESLA

G. Chiodini – INFN Lecce

CDS Lecce 12 luglio 2013

DIAPIX (2011-2013 + 1)

Richiesta di prolungamento di un anno dopo lo stop della call da parte del presidente di G1 a seguito della critica che ci sono solo gruppi ATLAS e manca una componente CMS

Responabile nazionale: Gabriele Chiodini

WP1: pixel ibridi al diamante (Mauro Villa - Bologna)
WP2: dosimetro al diamante 2D per IMRT (Marta Bucciolini - Firenze)
WP4: contatti grafitici con laser su diamante (Maurizio Martino - Lecce)
WP5: timing con diamante (Roberto Cardarelli – Roma2)

Anagrafica

Sezioni: BO+FI+LE+RM2
di cui BO e RM2 nuove

Lasciano: BA, FI, PG (nuova sigla)
CT, Mi-Bi (call silicio G1)
PV (call elettronica G1)
RM3

Richieste = 5 ke + 15 ke

INFN	Name	Position	CSN	%
Bo	Bruschi Marco	1st Resercher INFN	I	30
Bo	Giorgi Filippo	Post Doc	I	40
Bo	Sbarra Carla	Resercher INFN	I	30
Bo	Semprini Nicola	Full Professor	I	30
Bo	Valentinetti Sara	Post Doc	I	30
Bo	Villa Mauro	Assistant Professor	I	40
				2.0 FTE
RO2	Camarri Paolo	Resercher UNI	I	40
RO2	Cardarelli Roberto	1st Resercher INFN	I	40
RO2	Ciaccio Anna	Full Professor	I	20
RO2	Liberti Barbara	Resercher	I	40
RO2	Paolozzi Lorenzo	Phd student	I	20
RO2	Pillon M.	Resercher ENEA	V	50
RO2	Angelone	Resercher ENEA	V	50
RO2	-	-	-	100
RO2	-	-	-	50
				4.1 FTE
LE	Caricato Anna Paola	Resercher UNI	V	40
LE	Chiodini Gabriele	Resercher	I	40
LE	Martino Maurizio	Assistant Professor	V	50
LE	Maruccio Giuseppe	Resercher UNI - NNL-CNR	V	50
LE	Monteduro A.G.	Phd student	V	50
LE	Leo Chiara	Phd student	V	50
LE	Perrino Roberto	Resercher INFN	III	30
LE	Spagnolo Stefania	Resercher INFN	I	30
				3.4 FTE
TOTAL			**9.5 FTE = 18 stuff + 3 Phd student + 2 Post Doc**	

+ Firenze (6 ricercatori = 2.6 FTE)

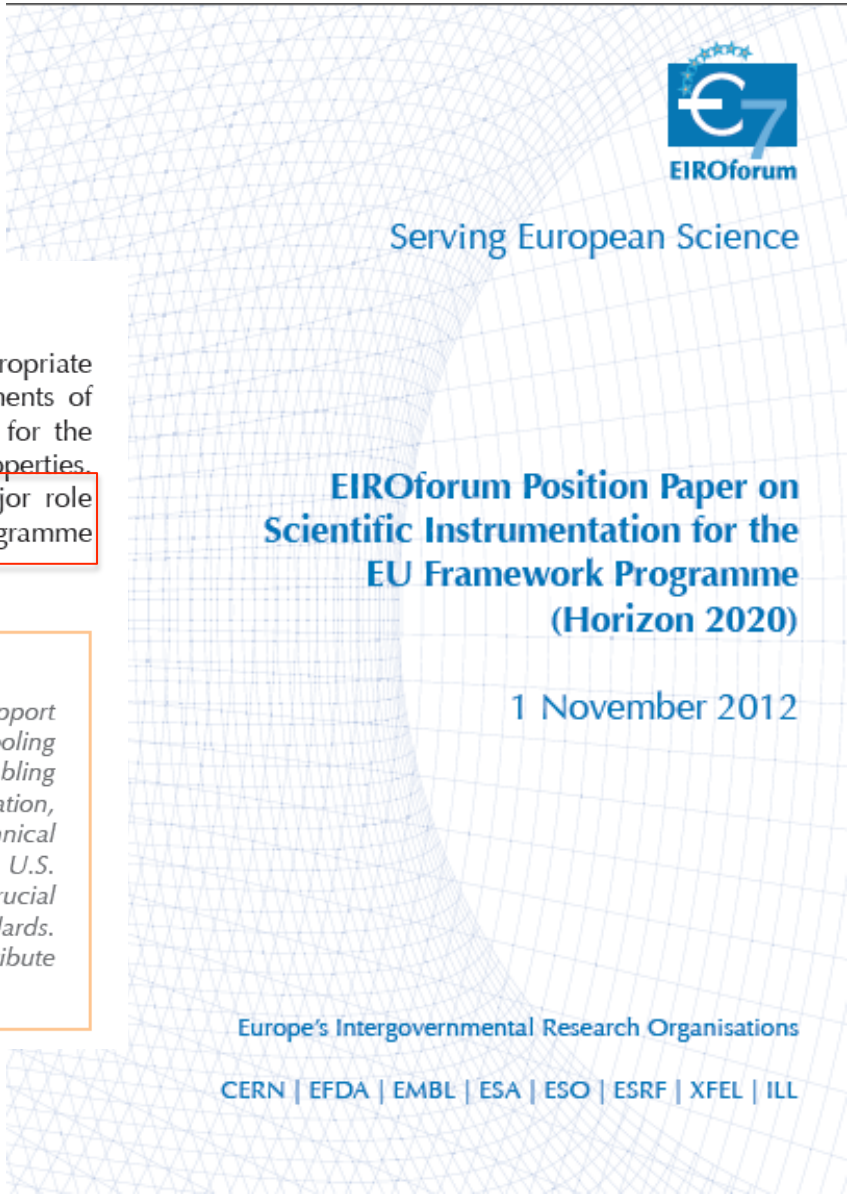
Horizon 2020

5. New engineering materials

New engineering materials will be increasingly needed to provide the most appropriate solutions to the unprecedented performance requirements of scientific instruments of the future. Performance stability, weight, dimensional precision, etc. will call for the development of materials with tailored thermal, electrical and mechanical properties. Diamond-based technology, as a specific example, is expected to play a major role in optics and detector development; it should be targeted as a strategic programme for development.

Recommendation:

The European Commission is invited to create specific calls and programmes to support the development of enabling technologies in the above field: detectors, optics, cooling technologies, adaptive systems, new engineering materials. All these areas of enabling technologies are identified as critical for the future development of scientific instrumentation, and could also lead to significant developments for the wider domestic or technical marketplace. A majority of these developments are currently led by Japan and the U.S. This could lead to exclusion of Europe from access to, influence over or control of crucial technologies of the future as well as exclude them from the setting of international standards. Successful developments, coordinated with industry, of these technologies would contribute to economic growth in Europe.



ELIMED (2013-2015)

Aperta sigla a Lecce quest'anno dopo la conclusione di LILIA)

Il gruppo ha applicato per un FIRB di G5

Ricercatori:

- Vincenzo Nassisi P.O 100 % Responsabile Locale
- Alfredo Castellano P.O. 100 % S. dei materiali
- Massimo Di Giulio P. A. 70 % S. dei materiali
- Giovanni Buccolieri Ric 100 % S. dei materiali
- Domenico Delle Side Dott 100 % Dottorando
- Fabio Paladini 40 % Tecn. Laureat.

Tecnici:

- Romualdo Gerardi 20 % T. Universit. Elettr
- Giorgio Accoto 30 %T. Universit. Mecc

Richieste 29 ke = 12 MI + 12 CO + 5 INV

ELIMED

1 PROJECT OVERVIEW

Proposal name	ELIMED
Involved INFN Sections	LNS, LNL, INFN-CT, INFN-BO
	G A Pablo Cirrone and L Torrisi (INFN-LNS)
	Drug Sciences Department, University of Catania, Catania (I); School of Mathematics and Physics, Queen's University of Belfast, Belfast (UK); ELI Experimental Program Department, Institute of Physics of the ASCR, Prague, (CZ); Russian Academy of Science, Moscow (RU); Vinca Institute, Belgrade (Serbia)
	3 years (2013 - 2015)

ELI - THE EXTREME LIGHT INFRASTRUCTURE

A European facility opening new avenues to reveal the secrets of matter on ultra-short timescales.

ELI is a European Project, involving nearly 40 research and academic institutions from 13 EU Members Countries, forming a pan-European Laser facility, that aims to host the most intense lasers world-wide.

The facility, based on four sites, will be the first large scale infrastructure based on the Eastern part of the European Community and has obtained a financial committment exceeding 700 MEuro. The European Commission has funded the first ELI-pillar, located in the Czech Republic, with a budget of nearly 290 MEuro and the second pillar, located in Romania, with nearly 356 MEuro.

1.1 SHORT DESCRIPTION

The project aim is the development of innovative instrumentation, technologies and new methodologies for dosimetry and radiobiology in order to realize an hadrontherapy facility based on laser-driven beams. The project will closely follow the activities of the ELIMED project that will realize a hadrontherapy transport beam line using laser-driven beams accelerated at the ELI-Beamlines laser facility in Prague (CZ). One of the project main goals will be the realization of a first prototype of energy selector for laser-driven proton beams and of the necessary diagnostic systems in order to perform the first dosimetric and radiobiological measures at three different laser facilities: the TARANIS laser facility in Belfast (UK), the GIST, Gwangju in Korea and the FLAME laser in Frascati (I).

Part of the developed diagnostic will be also tested at the PALS facility in Prague (CZ).

NIRFE (Near InfraRed Fluorescence Eye 2012-14)

Cataldi Gabriella	Ricercatore	INFN	20 %
De Tomasi Ferdinando	Associato	Ricercatore	40 %
Fonti Sergio	Associato	Prof. Associato (RESPONSABILE LOCALE)	40 %
Perrone Alessio	Associato	Prof. Ordinario	20 %

Nessuna richiesta economica per il 2014

TESLA (technological equipment for Science life application 2013-14)

De Nunzio Giorgio, Associato Ricercatore, 80% (RESPONSABILE LOCALE)
Cataldo Rosella, Associato Ricercatore, 70%
Donativi Marina, Assegnista, 100%
Quarta Maurizio, Ricercatore, 50%
Rucco Matteo, PhD student , 50%

Richieste 13 ke = 5 MI + 2 CO + 6 INV

INFN Lecce – Assegnazioni 2010-2013 e richieste 2014

- **Chiesto 79.0 keuro nel 2014. Assumendo Dotazioni 17 keuro. (4 sigle) 13.7 FTE**
- **Totale 51.0 keuro nel 2013. Dotazioni 17 keuro. (4 sigle–chiude ErmesU) 17.6 FTE**
- **Totale 85.0 keuro nel 2012. Dotazioni 13 keuro. (5 sigle). 9 FTE**
- **Totale 72 keuro nel 2011 + 21.5 keuro di anticipi nel 2010. (7 sigle+coram). 23 FTE**
  Dotazioni 18 keuro di cui 8.5 keuro assegnato a CORAM (COsmic RAy Mission)
- **Totale 108 keuro nel 2010 - 21.5 keuro di anticipi del 2011. (7 sigle) 17.7 FTE**
  Dotazioni 18.5 keuro