## Memorandum of Agreement between the Virgo collaboration and the INFN group of Sezione di Napoli for the participation to Virgo

## **April**, 2015

The purpose of this agreement is to describe the participation of the Napoli group to the Virgo collaboration. The period covered by this Memorandum is two years from the approval date of the VSC.

- CNRS and INFN signed an agreement concerning the realization of an antenna, VIRGO, for the detection of gravitational waves on 27 June 1994 in Pisa. VIRGO consists of a three kilometer Fabry-Perot interferometric antenna aimed at the detection of gravitational waves in the frequency range 10-10000 Hz. The construction, exploitation and data analysis of the VIRGO antenna is under the responsibility of the Virgo collaboration, which has been defined in its present form in December 2001. The VIRGO collaboration is represented by its Spokesperson. The operation of the VIRGO antenna is supervised by the EGO Council.
- The Past involvements of the Napoli group are described in the previous MoA (see VIR-PLA-DIR-1000-221).

The current responsibilities of the Napoli group are the following:

- Advanced VIRGO Environment monitoring (R. De Rosa);
- Interferometer for measurement of mirrors resonance quality factors (L. Di Fiore);
- Electronic for local controls (L. Di Fiore)
- Interferometer steady state simulation (E. Calloni);
- Virgo co-representative in the LIGO-VIRGO detection committee (E. Calloni);
- Virgo co-chair in Stochastic Review Committee (F. Garufi);

Remark: the group will provide adequate support for the proper operation and maintenance of the devices under its responsibility.

- The current Napoli group contributions to Virgo working groups are the following:
  - Participation to the construction activities of the Advanced Virgo interferometer
  - Participation to R&D activities on squeezed light, high-vacuum compatible accelerometers
  - Payload local control and global alignment
  - Data analysis and EM follow up

## 5. The current Napoli group composition is:

Approved:

	FTE	Author	Student	Activity and thesis argument if any
Enrico Calloni (U)	70%	Yes	No	Participation to ISC, R&D squeezing,
				Group leader
Fausto Acernese (U)	50%	Yes	No	Participation to Environmental
				monitoring, R&D on Accelerometers for
				Newtonian subtraction
Fabrizio Barone (U)	50%	Yes	No	Participation to Environmental
				monitoring, R&D on Accelerometers for
				Newtonian subtraction
Martina De Laurentis (U)	100	Yes	No	Participation to R&D on squeezing
	%			
Rosario De Rosa (U)	40%	Yes	No	Environmental monitoring, local controls,
				alignment
Luciano Di Fiore	40%	Yes	No	Payloads Q measurements, local controls
Tristano Di Girolamo (U)	50%	Yes	No	Participation to EM follow up, data
				analysis
Fabio Garufi (U)	70%	Yes	No	Participation in Environmental
				monitoring, data analysis
Aniello Grado (INAF)	40%	Yes	No	Participation in Local Control, Q
				measurements
Leopoldo Milano	50%	Yes	No	Data Analysis
				,
Rocco Romano (U)	50%	Yes	No	Participation to Environmental
				monitoring, R&D on Accelerometers
				R&D on Accelerometers for Newtonian
				subtraction

The Napoli group leader will inform the collaboration of any change in the group composition and of any new thesis proposed.

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Virgo Collaboration Spokesperson	Napoli Group Leader
01/04/2015	01/04/2015
Date	Date