Memorandum of Agreement between the Virgo collaboration and the APC group for the participation to Virgo

April, 2015

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

1. 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.
2. The APC is a research institute located in Paris, devoted to particle astrophysics and cosmology. APC gathers about 180 scientists and engineers and it is supported by CNRS, Université de Paris Diderot, CEA and Observatoire de Paris.

3. The APC Virgo performs the following activities in Virgo:

Data analysis:

- Burst group co-chair
- Gravitational wave burst search through wavelet graphs
- GPU acceleration of the coherent WaveBurst gravitational-wave detection pipeline
- Joint search of gravitational waves and high energy neutrinos
- Electromagnetic follow-up of LIGO-Virgo events
- Participation to the internal review activity

Advanced Virgo

- Responsibility of the mode-matching telescopes (sub-systems INJ and DET)
- Responsibility of the OSD task: "compatibility of Advanced Virgo with Laguerre-Gauss beams"
- Participation to the internal review activity
- Participation to the pre-commissioning and commissioning activities

R&D for advanced Virgo and third generation interferometers

- Research on Laguerre-Gauss laser beams for the thermal noise reduction
- Research on the geophysics applications of GW detectors.

Outreach

- Participation to the Virgo outreach activities.

4. The APC group composition is the following:

Name	FTE	Author	Student	Main activities and FTE
Matteo Barsuglia Researcher	70%	Yes	No	AdV 40%, R&D 10%, V (group leader) 20%
Eric Chassande-Mottin Researcher	80%	Yes	No	DA 80%
Eric Lebigot Researcher	50%	Yes	No	DA 50%
Matteo Tacca Researcher	100%	Yes	No	AdV 100%
Jean-Pierre Baronick Mechanical engineer	10%	No	No	AdV 10%
Christelle Buy Optical engineer	70%	Yes	No	AdV 60% R&D 10%
Eleonora Capocasa PhD	100%	Yes	Yes	AdV 100%
Nathan Bleurvacq Mechanical engineer	20%	No	No	AdV 20%
Johannes Amarni Technician	10%	No	No	AdV 10%
Jean-Luc Robert engineer - communication	10%	No	No	V (Outreach) 10%

Remarks:

- In the activity section the leading activity and the FTE are specified for each of the five main categories: Virgo operations (V), Advanced Virgo (AdV) and Data Analysis (DA) and R&D. Activities that cover several topics (like group leader) are put it under Virgo operation.
- The APC group leader will inform the collaboration of any change in the group composition and of any new thesis proposed.

Approved:

Digitally signed by Fulvio Ricci
DN: cn=Fulvio Ricci, o=Università di Rome La Sapienza, ou=Dipartimento di Fisica, email=fulvio.ricci@uniroma1.it, c=IT
Date: 2015.04.15 11:22:20 +02'00'

Virgo Collaboration Spokesperson

APC group Leader

01/04/2015
Date

01/04/2015
Date