



# EGO en synthèse:



Le consortium  
Franco-Italien  
créé pour soutenir  
l'expérience VIRGO et  
promouvoir la coopération  
dans le domaine de la  
physique des ondes  
gravitationnelles en Europe



# The history of the project

## The VIRGO Collaboration:

### ➤ First studies:

- Brillet (Nice): optics
- Giazotto (Pisa): seismic isolation

### ➤ Collaboration France-Italy established in 1992

CNRS and INFN approved the VIRGO project.

1997 Construction starts near Pisa



➤ **Foundation of EGO in 2000**

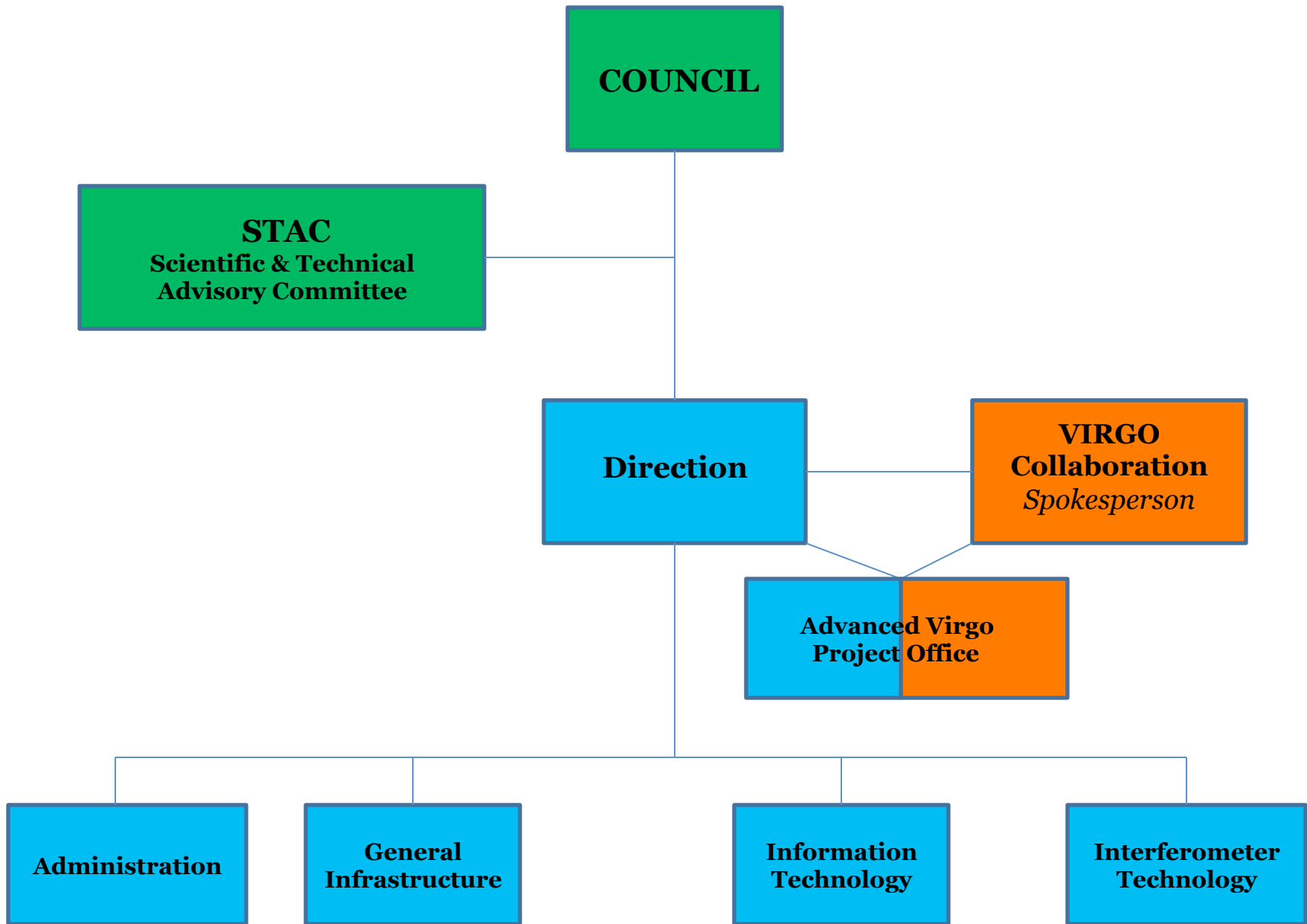
2004/2005 Commissioning

2006 Physics

**Netherlands: Nikhef joined EGO/Virgo in 2006**

➤ **EGO Council approved Advanced VIRGO in 2009**

**Poland (POLGRAW) & Hungary (RMKI) joined EGO/  
Virgo in 2010, Spain (Valencia Un.) in 2016**





# EGO Support to VIRGO

To ensures operation, maintenance and upgrade of the interferometer VIRGO,

Infrastructures & laboratories:

Optics

Electronics

Ultra-High Vacuum

Mechanics

Computing

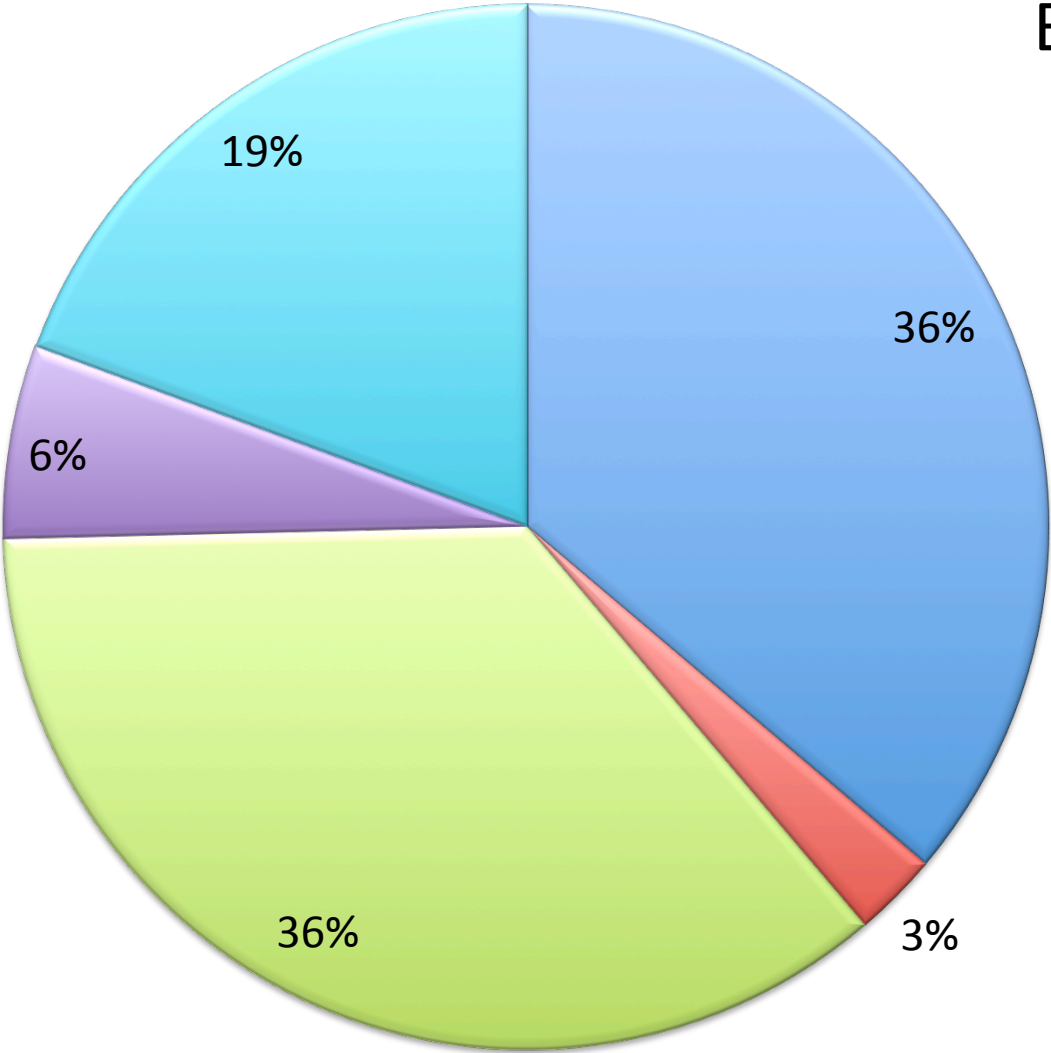
# Budget 2017

	Incomes
CNRS	4.500.000
INFN	4.500.000
Other incomes	620.000
Residuals	1.057.000
	<b>10.677.000</b>

**Till 2010  
5+5 M€**

Expenditures per Dept	Allocation
Administration	5.514.000
General Infrastructure	1.445.000
Interferometer Technology	583.000
Information Technology	785.000
Fellowships	280.000
AdV investments	943.000
Virgo Maintenance & Upgrades	1.127.000
	<b>10.677.000</b>

# Budget 2017



- personnel
- fellows
- running costs
- EGO Investments
- Virgo

# Contributions for AdV

**CNRS:**

Total via EGO budget	Total via Labs	Total contribution
<b>4 599</b>	<b>2 401</b>	<b>7 000</b>

**INFN:**

Total via EGO budget	Total via Labs	Total contribution
<b>6 027</b>	<b>973</b>	<b>7 000</b>

**Nikhef:**

In Kind
<b>2 000</b>

**EGO:**

Direct	Indirect
<b>7 800</b>	<b>3 339</b>



# EGO Mandate on a larger horizon, from Statute

## EGO:

Carries out research in the field of gravitation of common interest of the Members

Promotes contacts among scientists and engineers, dissemination and training for young researchers

Promotes co-operation on experimental and theoretical gravitational waves research in Europe

## European Projects coordinated by EGO

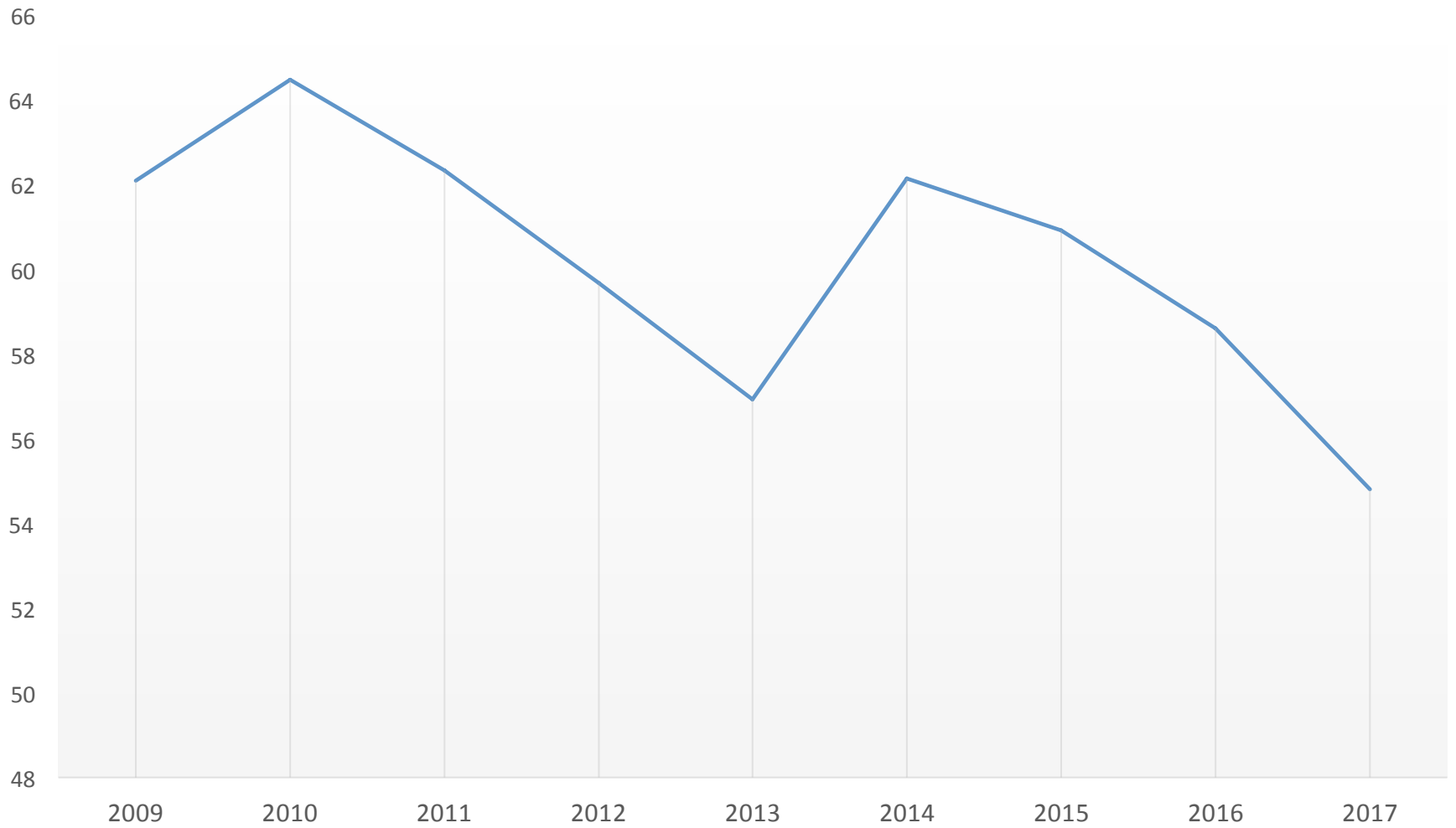
- In the past: 2004-2008
  - FP6-ILIAS integration activities (under the ASPERA hat)
    - Networking in GW - FR, DE, GB, IT (0.1M€)
- Recently: 2008-2012
  - Einstein Telescope Design Study - FR, DE, GB, IT, NL  
+ HU, PL, ES (3 M€)
- Now: 2012-2016
  - ELITES (FP7-IRSES) - DE, FR, GB, IT, NL / JP (0.3 M€)
  - GraWIToN (FP7-ITN) - FR, DE, GB, IT (3.6 M€)
  - *Role of EGO:*  
*Coordination of all the networking activities, participation to specific work packages, support of the management efforts, interface with the EU (reports, audit, ...)*

# Back to funding Agencies (k€)

From EGO Budget	2015	2016	2017
Missions	1380	600	600
Computing Centers	117	157	200
LMA	300	300	300
Fellowships	439	368	280
Upgrades			600
	2236	1425	1980

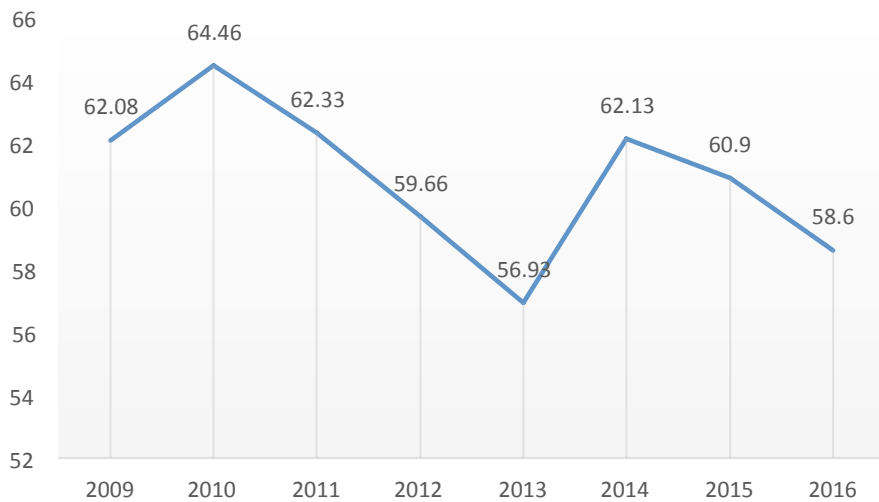
From EU funds - EGO coordination	CNRS	INFN
	727	1312

Evolution Ego staff (fte) from 2009 to 2017

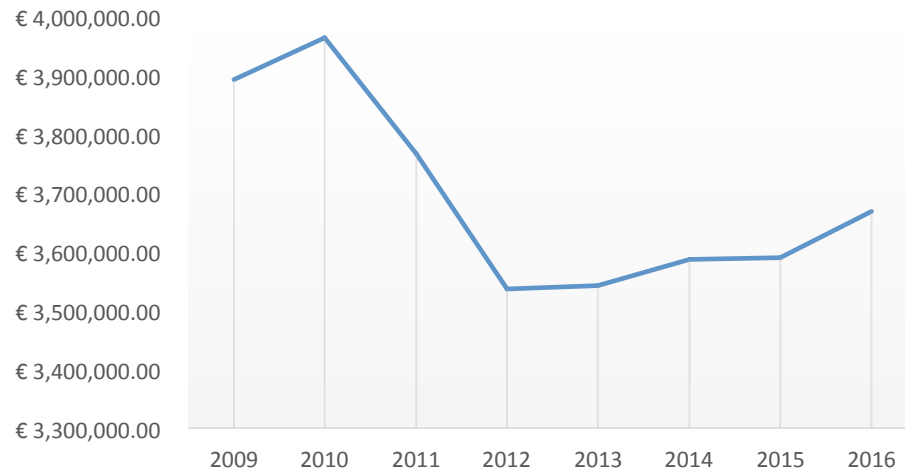


# EGO Personnel Statistics

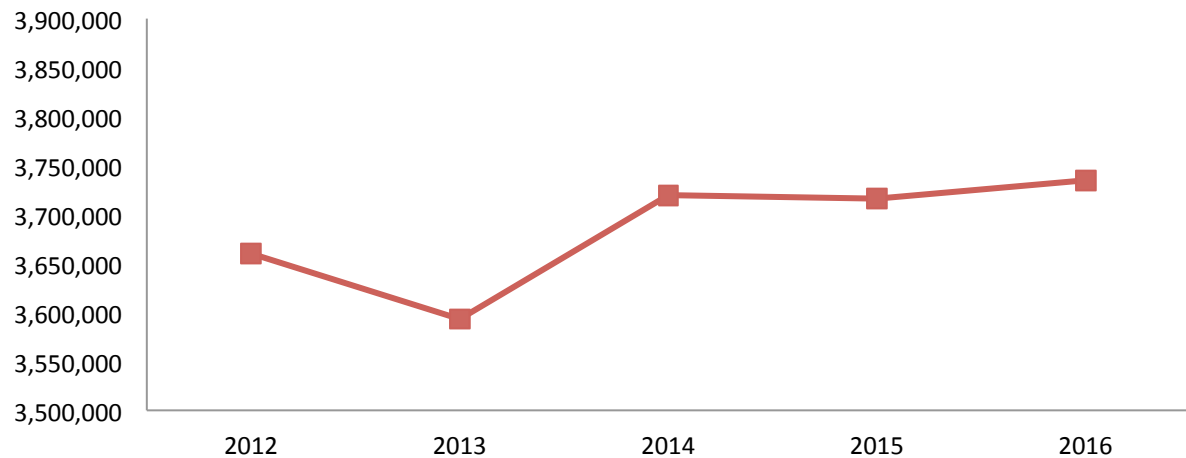
## Evolution Ego staff (fte) from 2009 to 2016



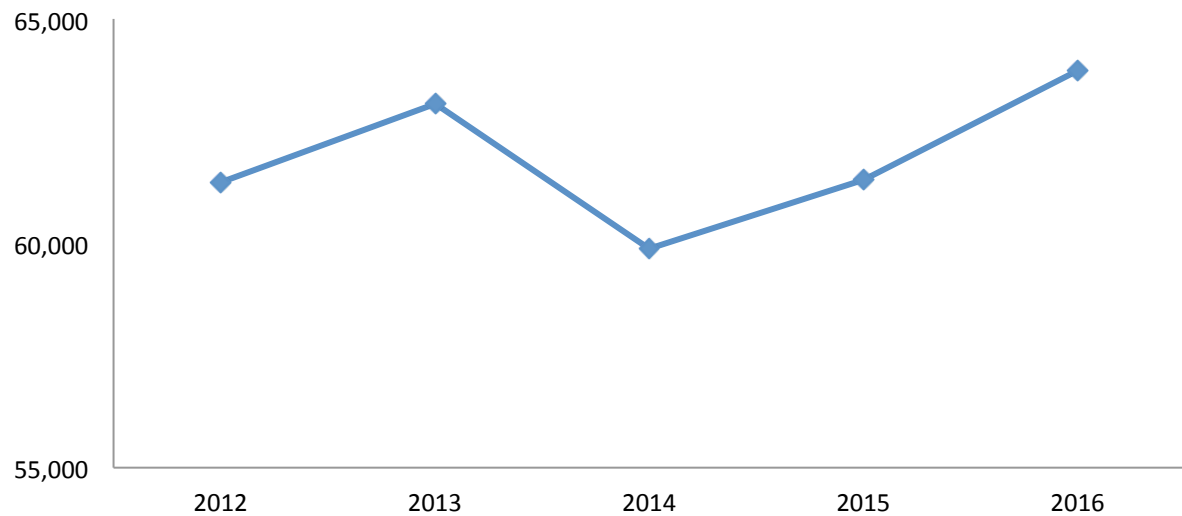
## Evolution Ego staff cost from 2009 to 2016



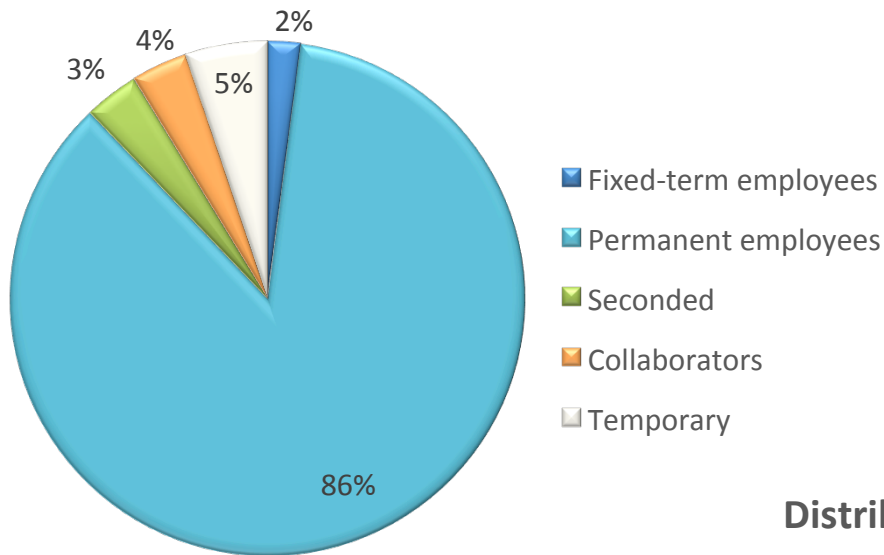
Masse  
salariale



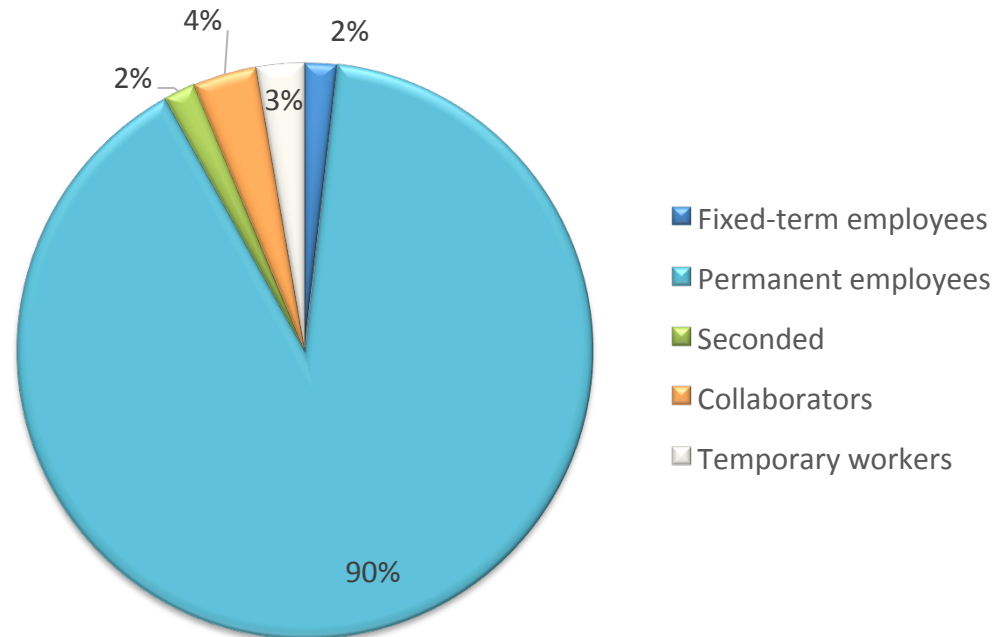
MS/FTE



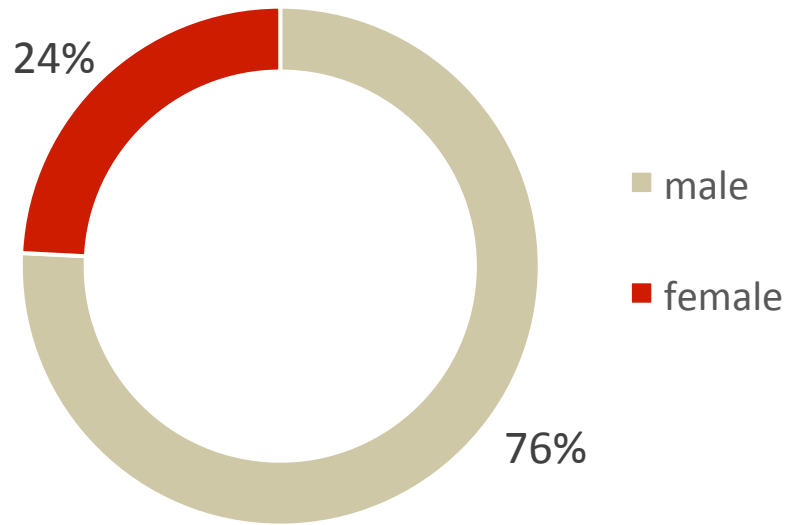
**Distribution Ego staff by kind of contract (fte) year 2016**



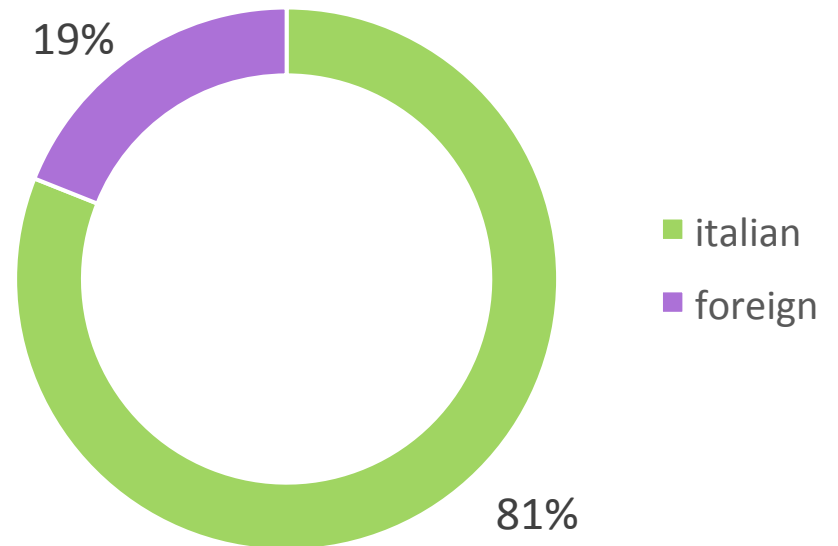
**Distribution Ego staff by kind of contract (fte)  
*Estimation year 2017***



Distribution Ego staff by gender 2016

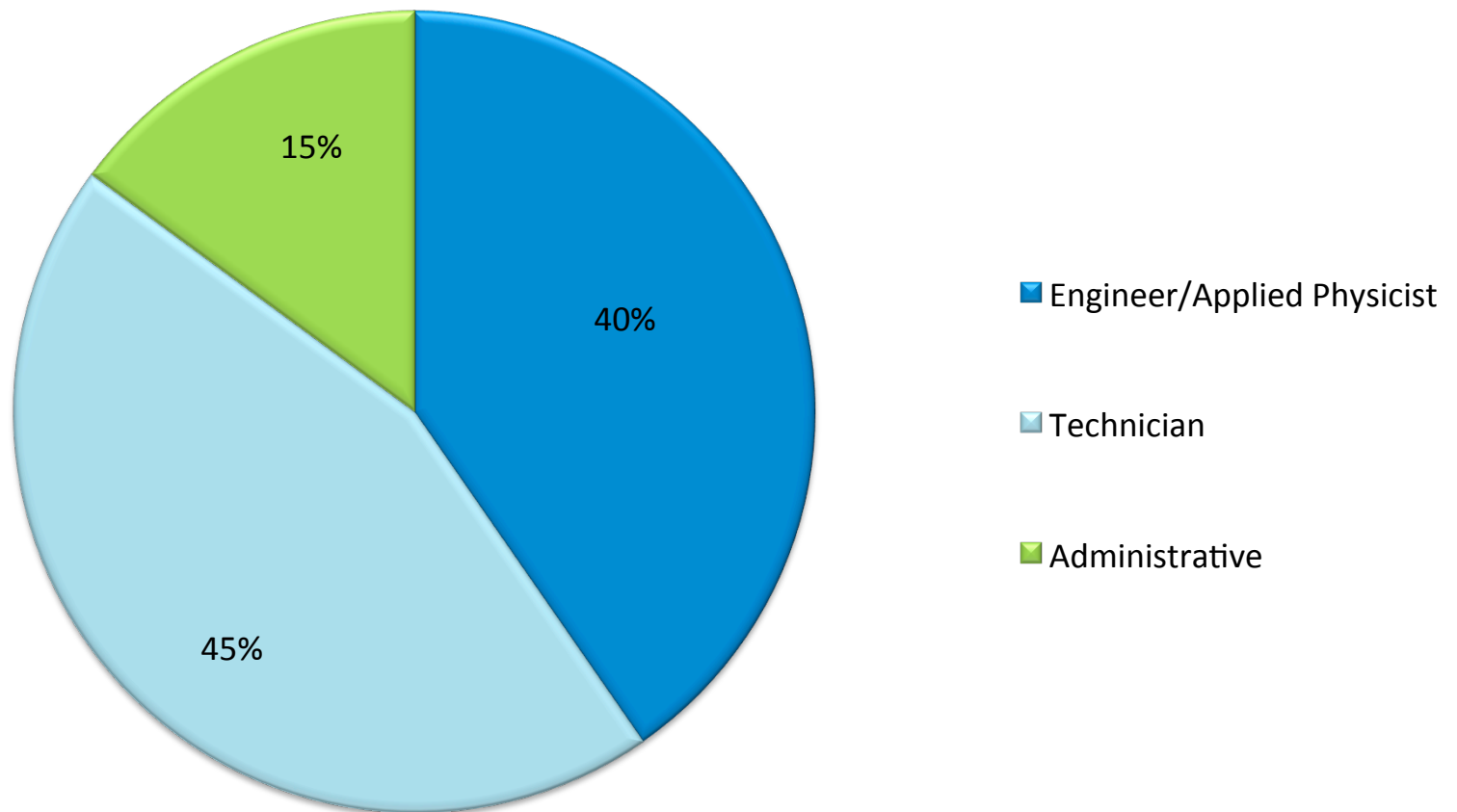


Distribution Ego staff by nationality 2016

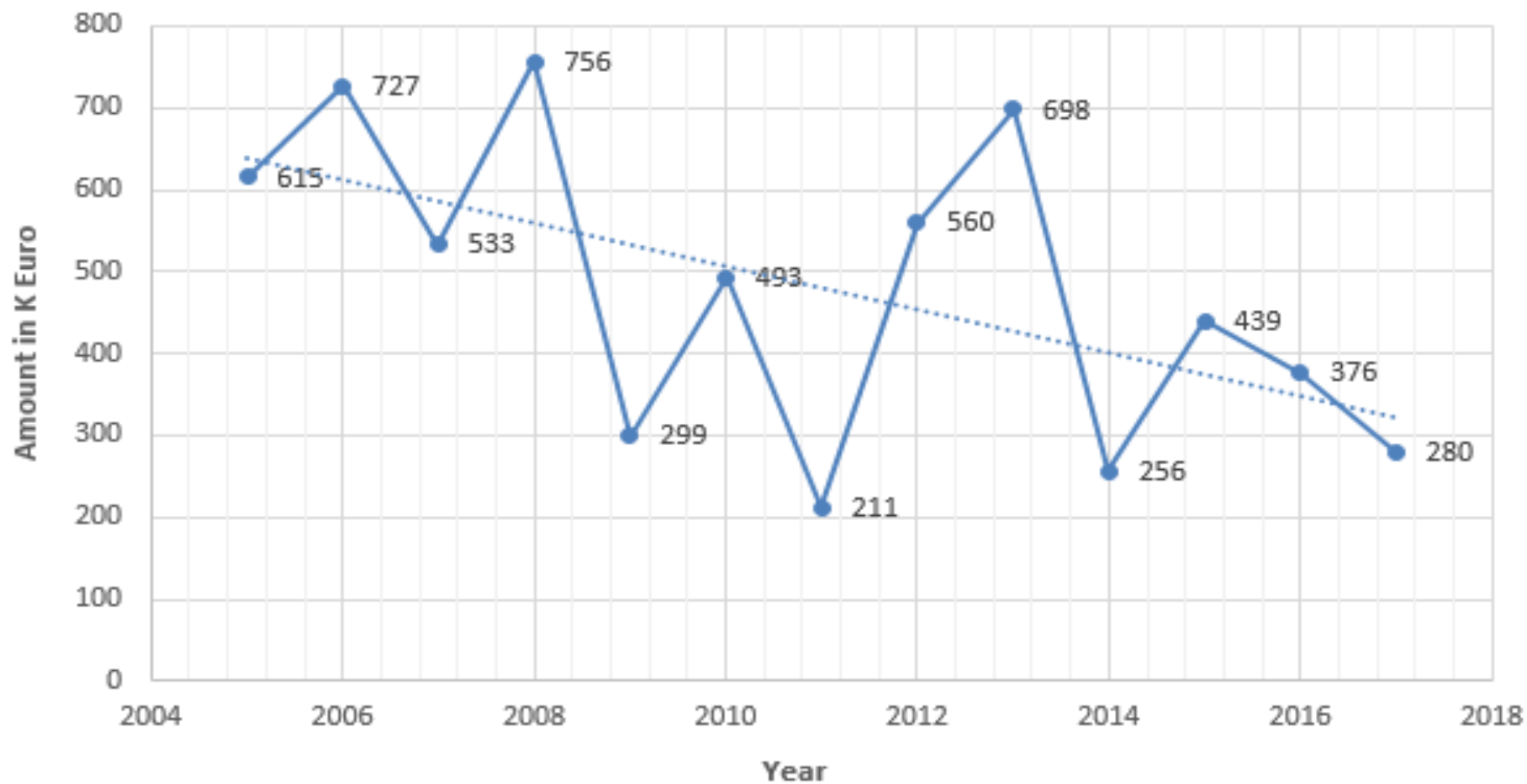




**Distribution Ego staff by kind of contractual title**  
*Estimation Year 2017*



### Fellowships in EGO budget over the years

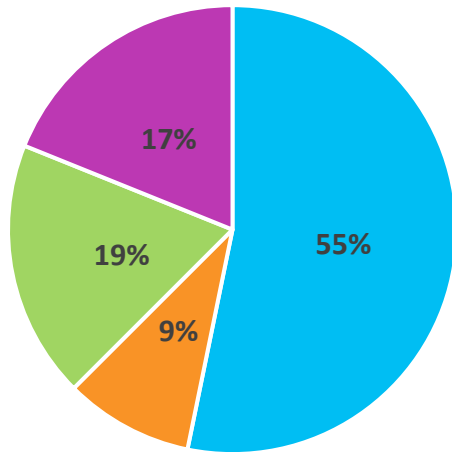


# Fellowships

2009/2016

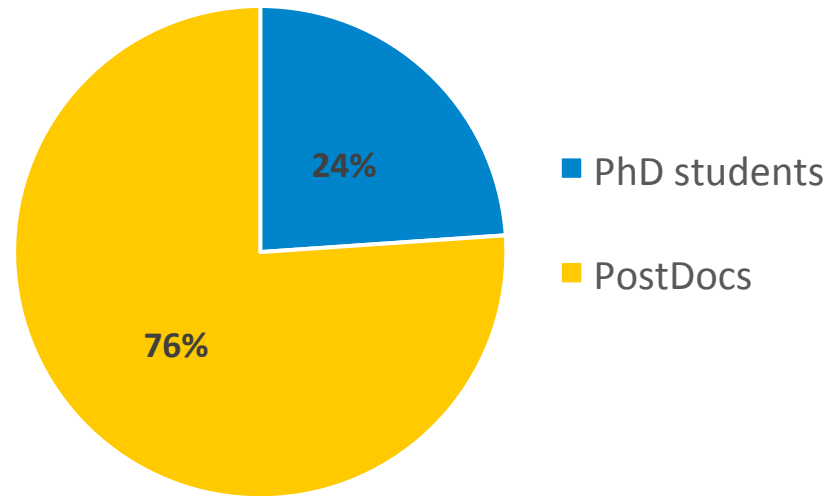
53 fellows  
3.32 M€

Scope of EGO-funded fellowships (2009-2016)

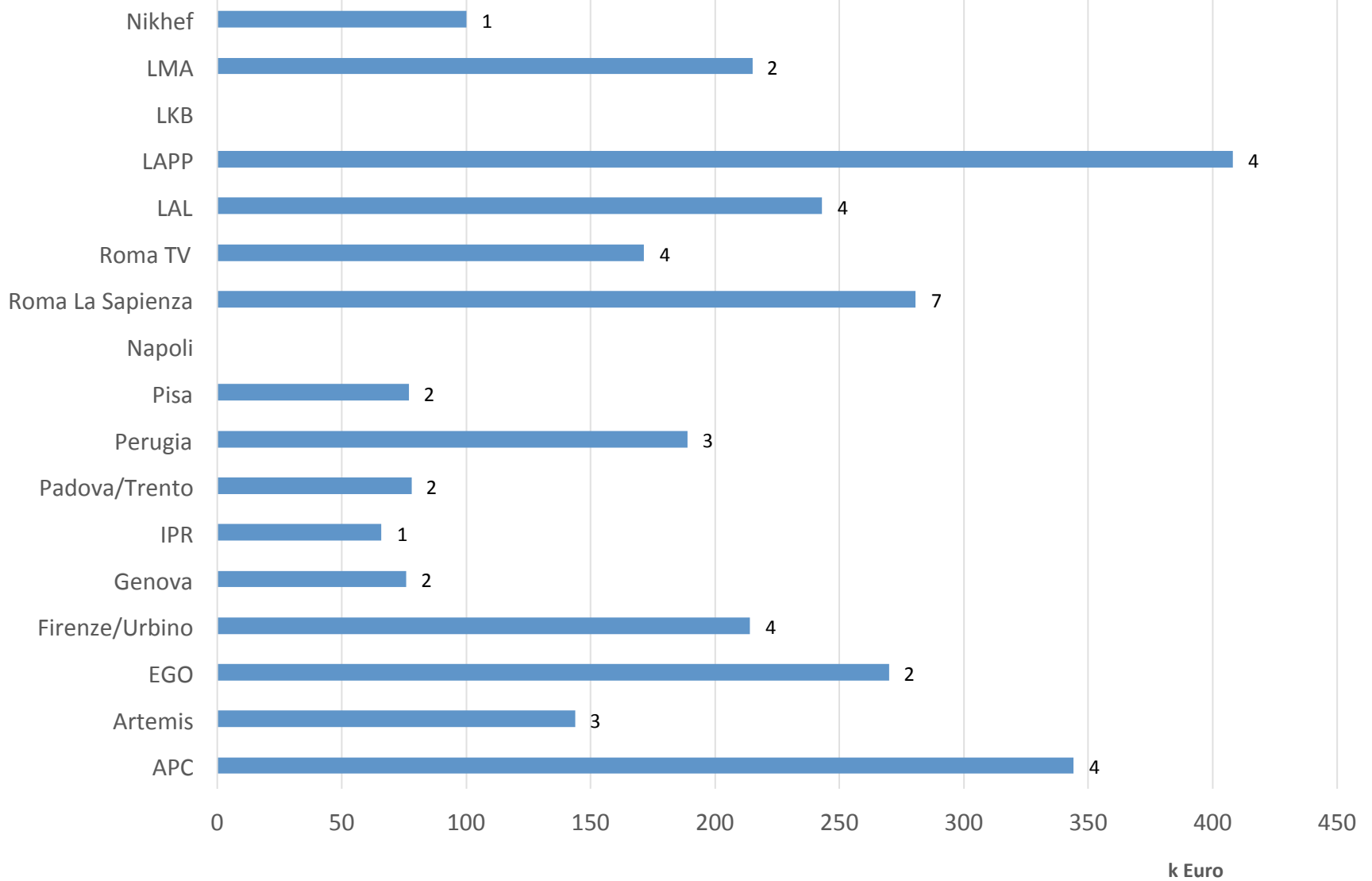


■ R&D/AdV ■ Data Analysis ■ Commissioning ■ VESF

PhD students versus Postdocs (2009-2016)



### Total funds received for fellowships from EGO Budget (2009-2016)



# Meeting of the students involved in GW search

*Workshop supported by the  
French embassy in Italy, EGO  
and University of Rome La  
Sapienza  
Cascina May 18th*

Speakers :  
Federique Marion  
Michel Boer  
Nicolas Arnaud  
Daniel Hoak

*In the afternoon:  
Presentation of the student activities  
and discussion*

## Atelier sur les Ondes gravitationnelles et l'Astronomie

Rencontre entre chercheurs de Virgo & étudiants en thèse

Thème :

Une journée d'échanges entre chercheurs confirmés et jeunes scientifiques à l'occasion de l'ouverture d'une nouvelle fenêtre sur l'Univers

Programme :

Matin : Cours

Prof. Patrice Hello: La découverte des ondes gravitationnelles  
Dr. Michel Boer: Astronomie avec les ondes gravitationnelles  
Dr. Frédérique Marion: Analyse des données des détecteurs d'ondes gravitationnelles

Déjeuner : Discussion conviviale entre chercheurs et doctorants

Après-midi : Ateliers thématiques; présentation de leur sujet d'étude par les étudiants

Date : 18 Mai 2017

Lieu: EGO-Virgo, Cascina (PI), Italie

Site internet : <https://web.infn.it/VirgoRoma/index.php/en/gw-workshop>

Organisation :

Nicolas Arnaud  
Simone Mastrogiovanni  
Severing Pérus



SAPIENZA  
UNIVERSITÀ DI ROMA



Liberté • Égalité • Fraternité  
RÉPUBLIQUE FRANÇAISE  
AMBASSADE DE FRANCE  
EN ITALIE

EGO EUROPEAN  
GRAVITATIONAL  
OBSERVATORY

<https://web.infn.it/VirgoRoma/index.php/en/25-gw-workshop>