

**FRANCE – ITALIA**

**Scientific impact of the program GALILEE  
(2005-2020)**

**MESRI-DAEI / MEAE**

**2021**

**<http://www.enseignementsup-recherche.gouv.fr>**

# GENERAL PRESENTATION OF THE PROGRAM

**Creation : 1994**

**The purpose of this program** is to develop excellence scientific and technological exchanges between the French and Italian laboratories, by promoting new scientific collaborations and integrating in the projects young researchers and PhD students.

**Total budget (France + Italia) : around 140 000 € / year**

>> French budget : around 70 000 € / year

>> Italian budget : around 70 000 € / year

Average budget per project (France + Italia) : around 8 000 € / year

**Average number of new funded projects per year : around 12/15**

**From 2005 to 2020 :**

**1880 applications submitted**

**359 projects funded**

# DATA SOURCES

## Campus France (2005-2020)

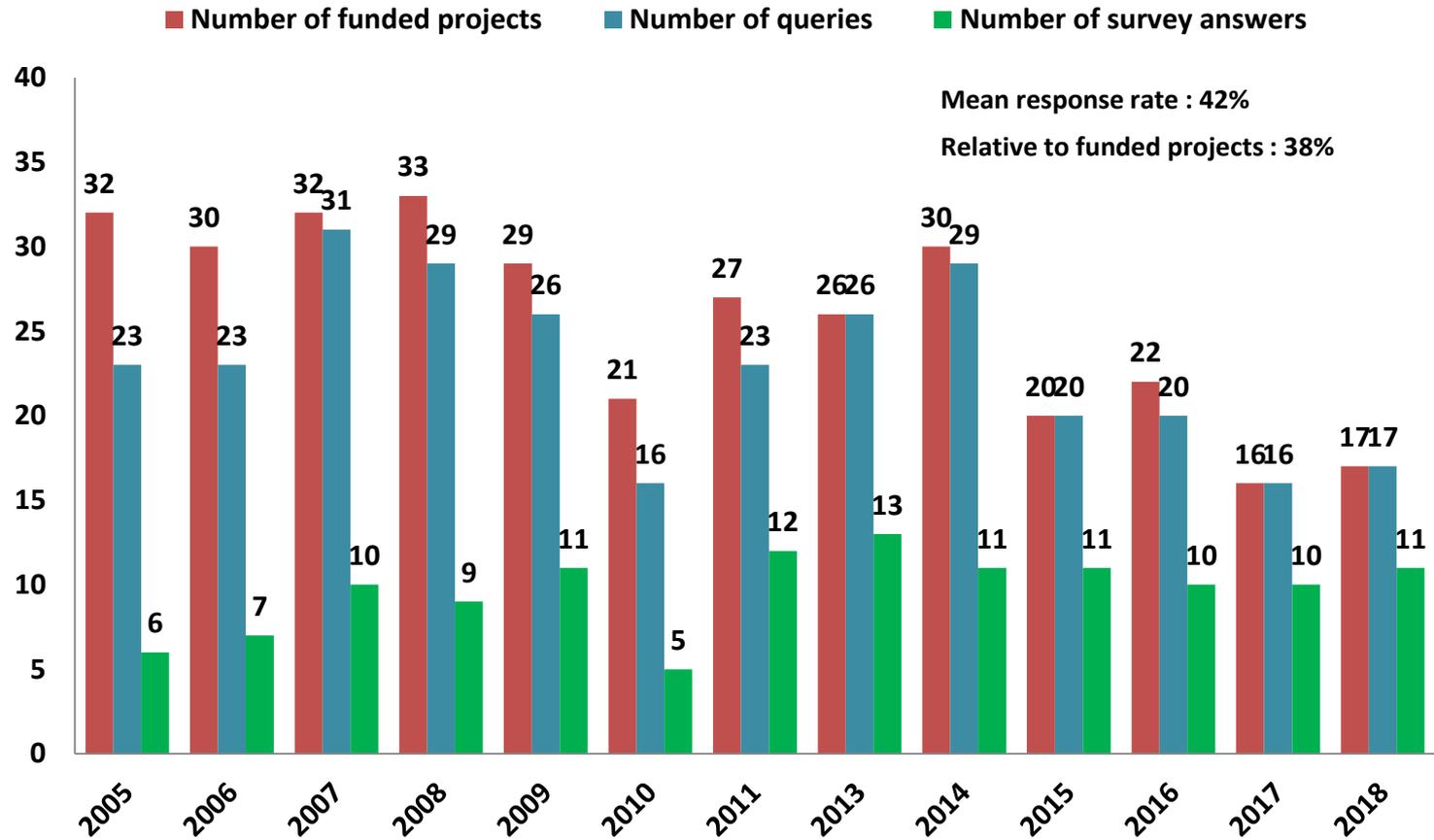
- Information about the PHC Galilée applications
- List of mobilities (from France to Italia)

## Survey (2005-2018)

- Target : French Principal Investigators of selected projects between 2005 and 2018
- Survey duration : 7 weeks between October and December 2020
- **42%** response ratio (126 respondents for 301 queries)

# ANSWERS TO THE SURVEY

Average response rate to the survey : **42 % (126 answers)**

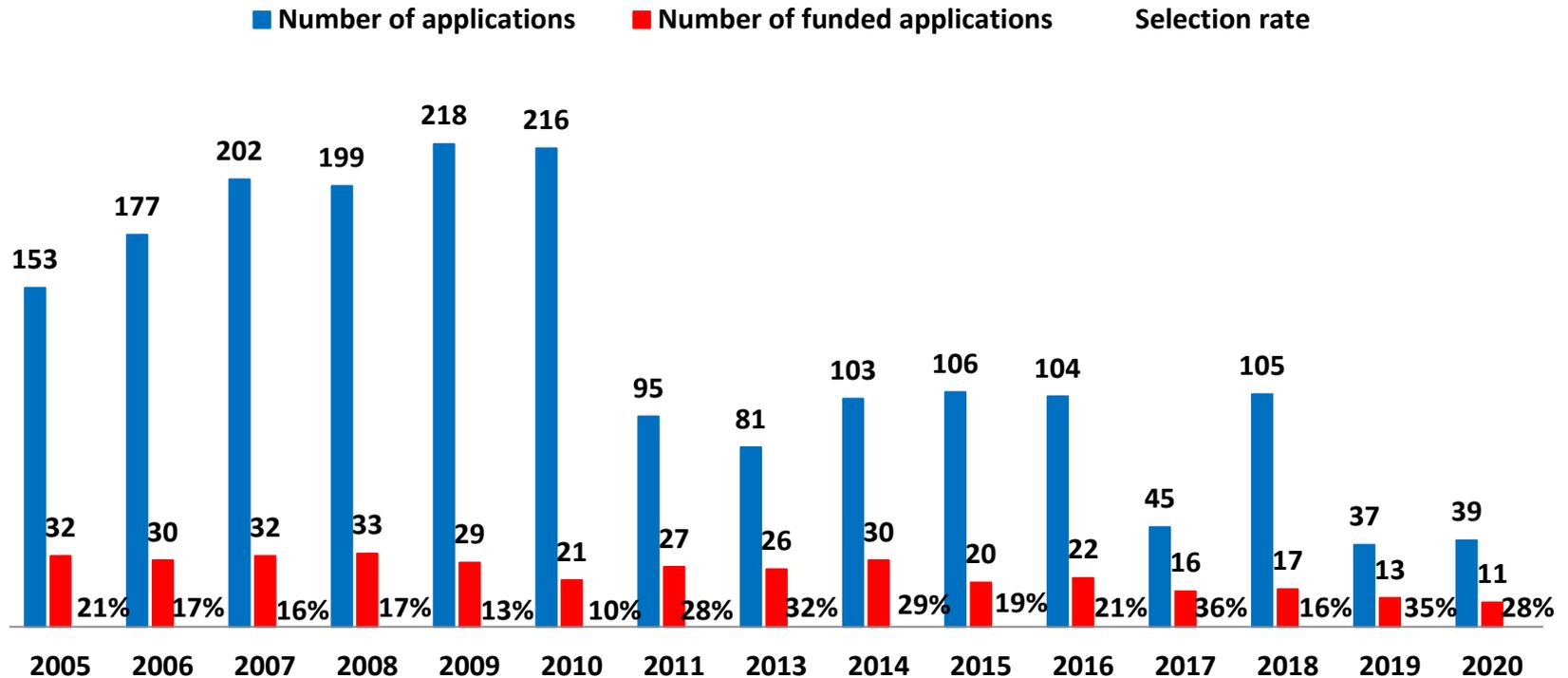


**335 funded projects between 2005 and 2018, 301 valid email addresses**

# 2005-2020 Key Points

# NUMBER OF APPLICATIONS AND SELECTION RATE

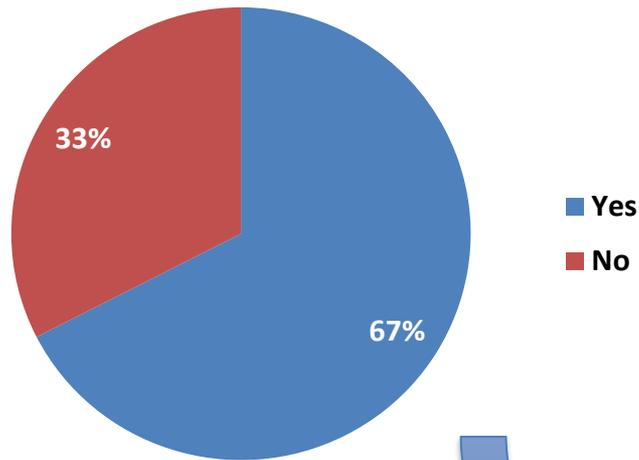
Average selection rate from 2005-2020: **19%**



The decrease in the number of applications is related to the fact that the call for offer was thematized from 2011 on

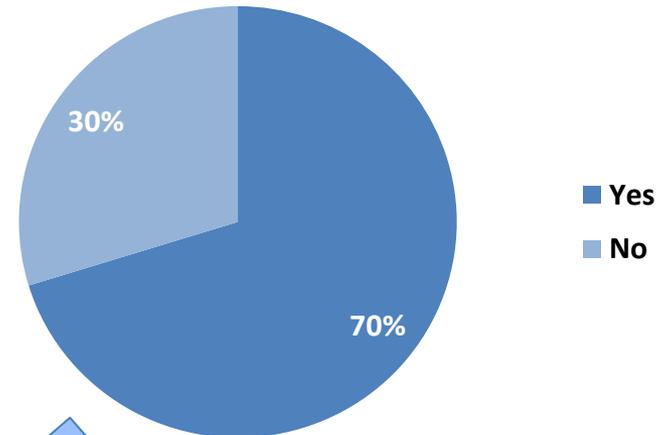
# BEFORE THE GALILEE PROJECT (1/2)

**Did you already cooperate with Italia in the past ?**



Data from 126 responses

**If yes, was it with the same partner?**



Data from 84 responses

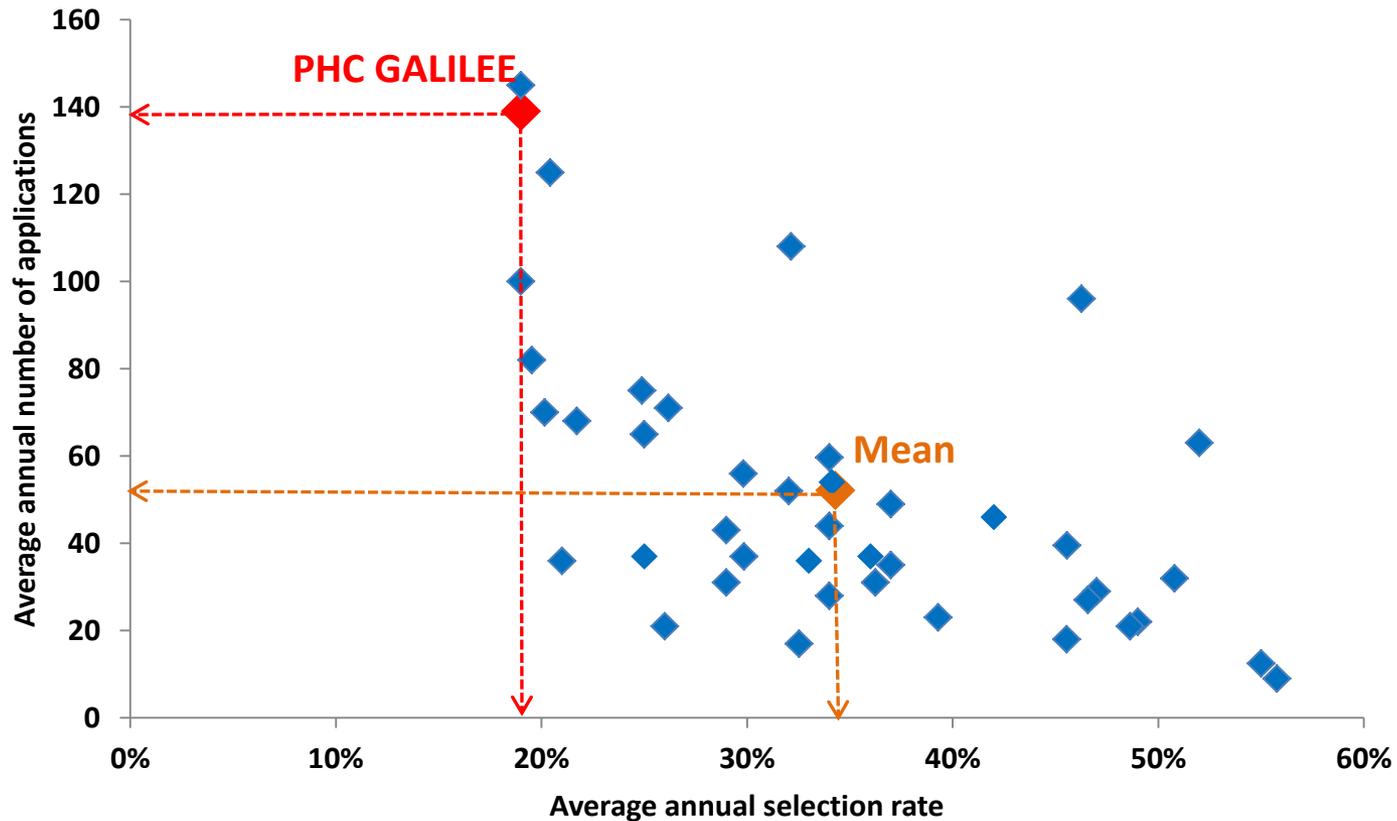
## BEFORE THE GALILEE PROJECT (2/2)

With which scientific collaboration program ?	
PHC GALILEE	31%
European 7th PCRD	10%
Cofunding with italian institutions	7%
ANR (French National Agency)	3%
CNRS International cooperation program (PICS)	3%
French Government Grants	2%
Other	43%

Plus 115 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)

Data from 90 responses

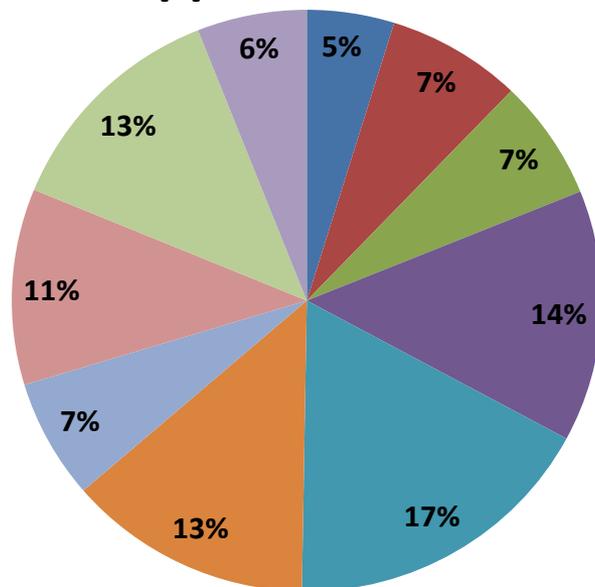
# NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 42 DIFFERENT BILATERAL PROGRAMS)



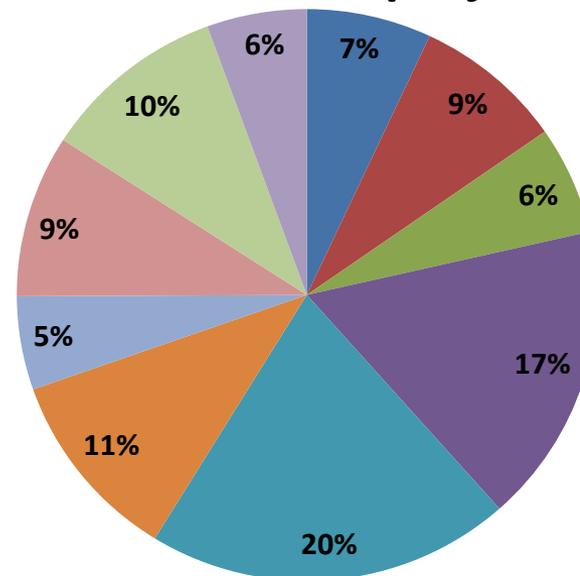
**Average selection rate for 2005-2020 : 19% vs 34% mean**  
**Average annual number of applications 2005-2020 : 139 vs 52 mean**

# SCIENTIFIC DOMAINS OF PROJECTS 2005-2020

Number of applications : 1880



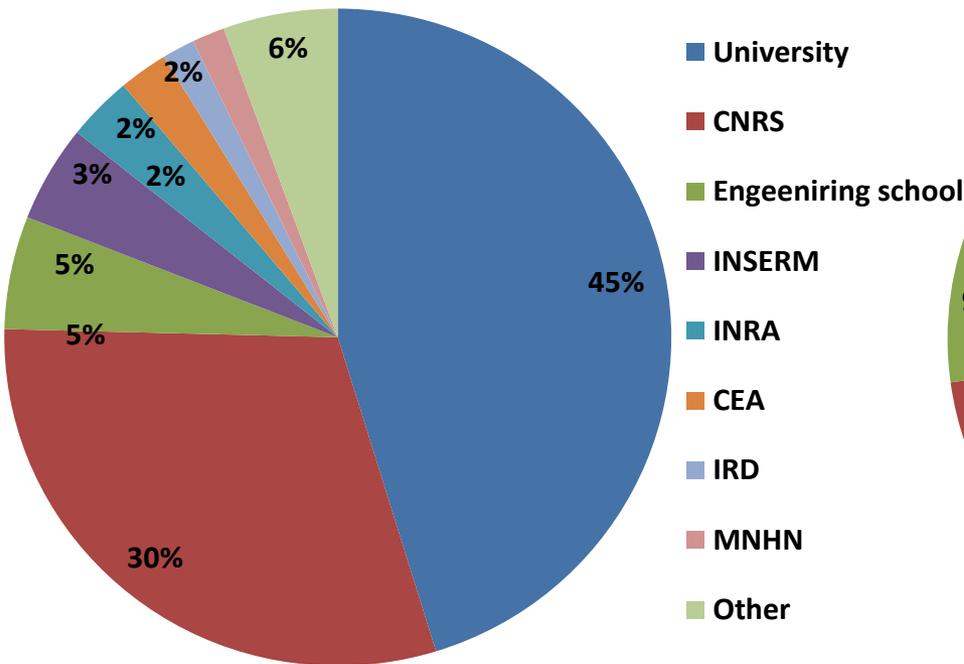
Number of funded projects : 359



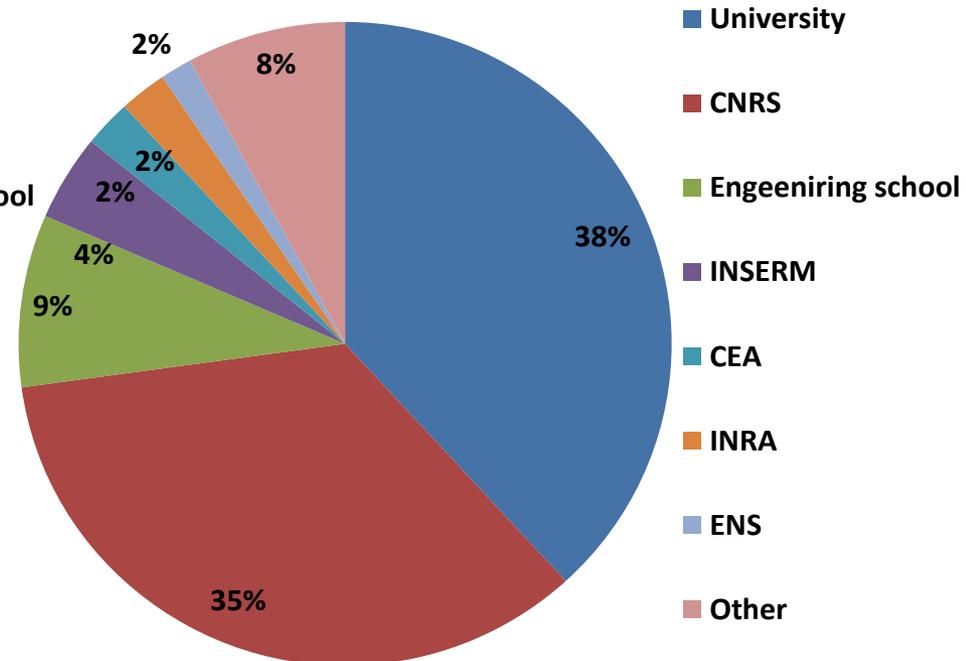
- Mathematics
- Physics
- Marine/Earth/Planet Sciences
- Chemistry
- Biology and Health
- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy/Ecology

# FRENCH PARTICIPATING INSTITUTIONS 2005-2018

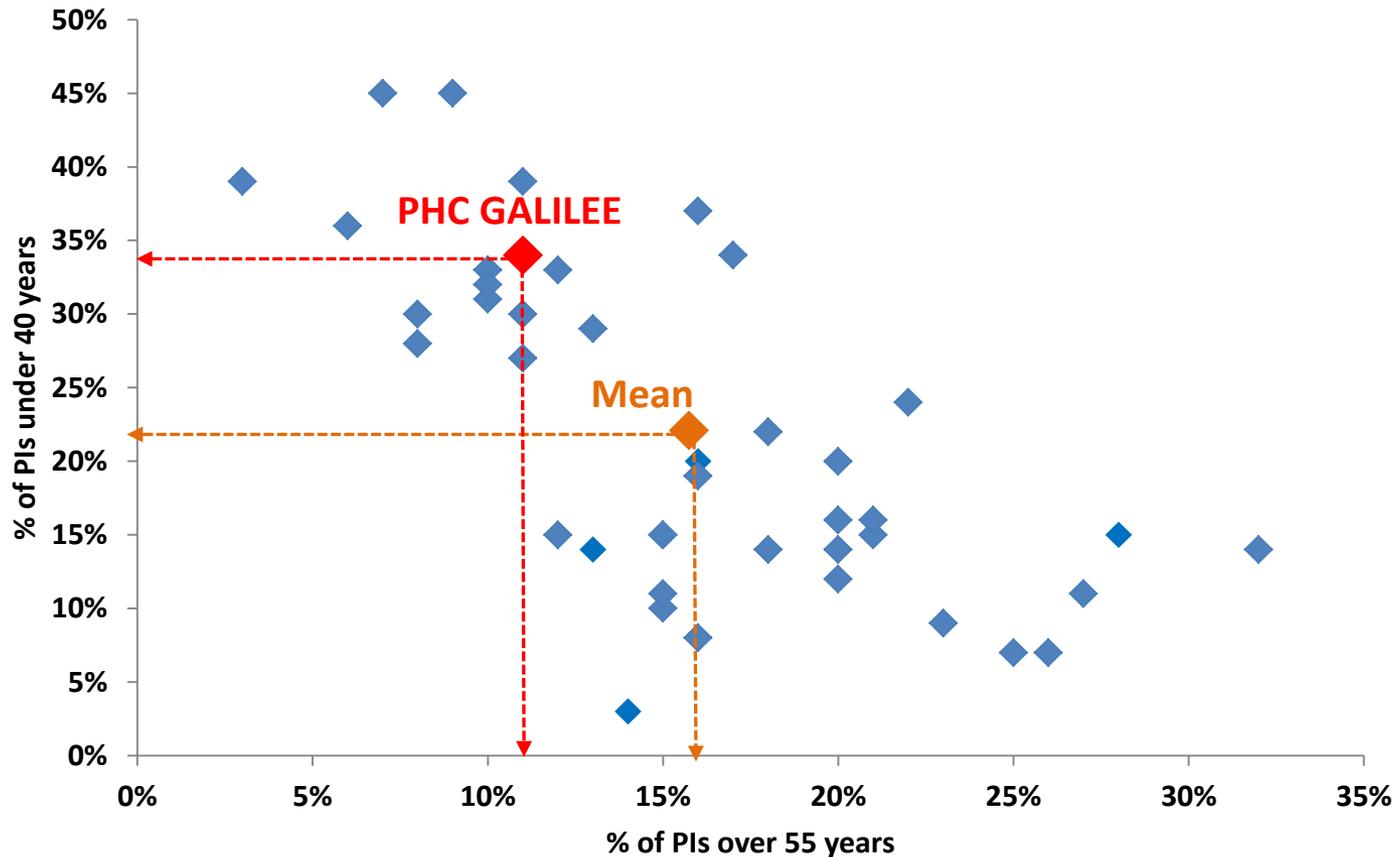
## PI's employers



## Laboratories authorities



# AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 42 DIFFERENT BILATERAL PROGRAMS)



PIs under 40 years : **34% vs 22% mean**

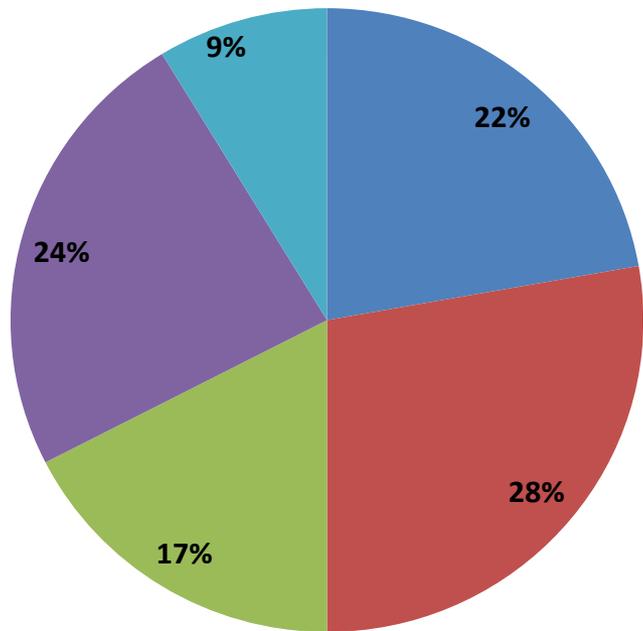
PIs over 55 years : **11% vs 16% mean**

**55% of the PIs are between 40 and 55 years**

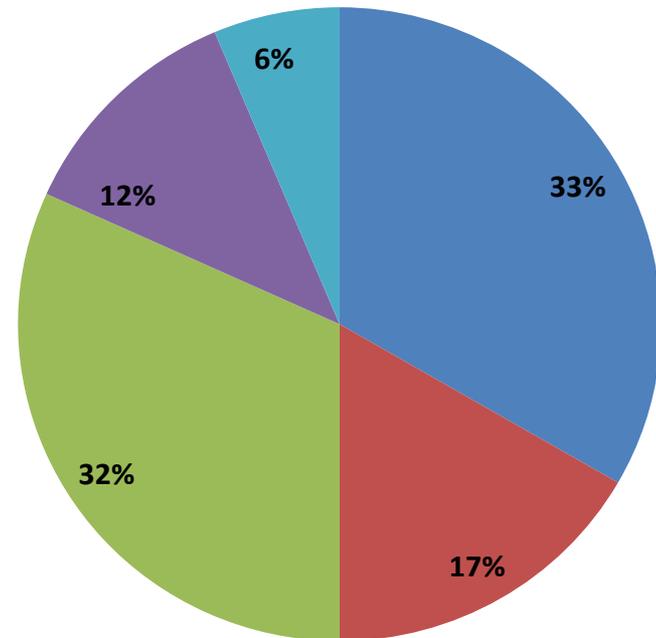
Data from 126 responses

# FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

## Previous professional status (at the beginning of the project)

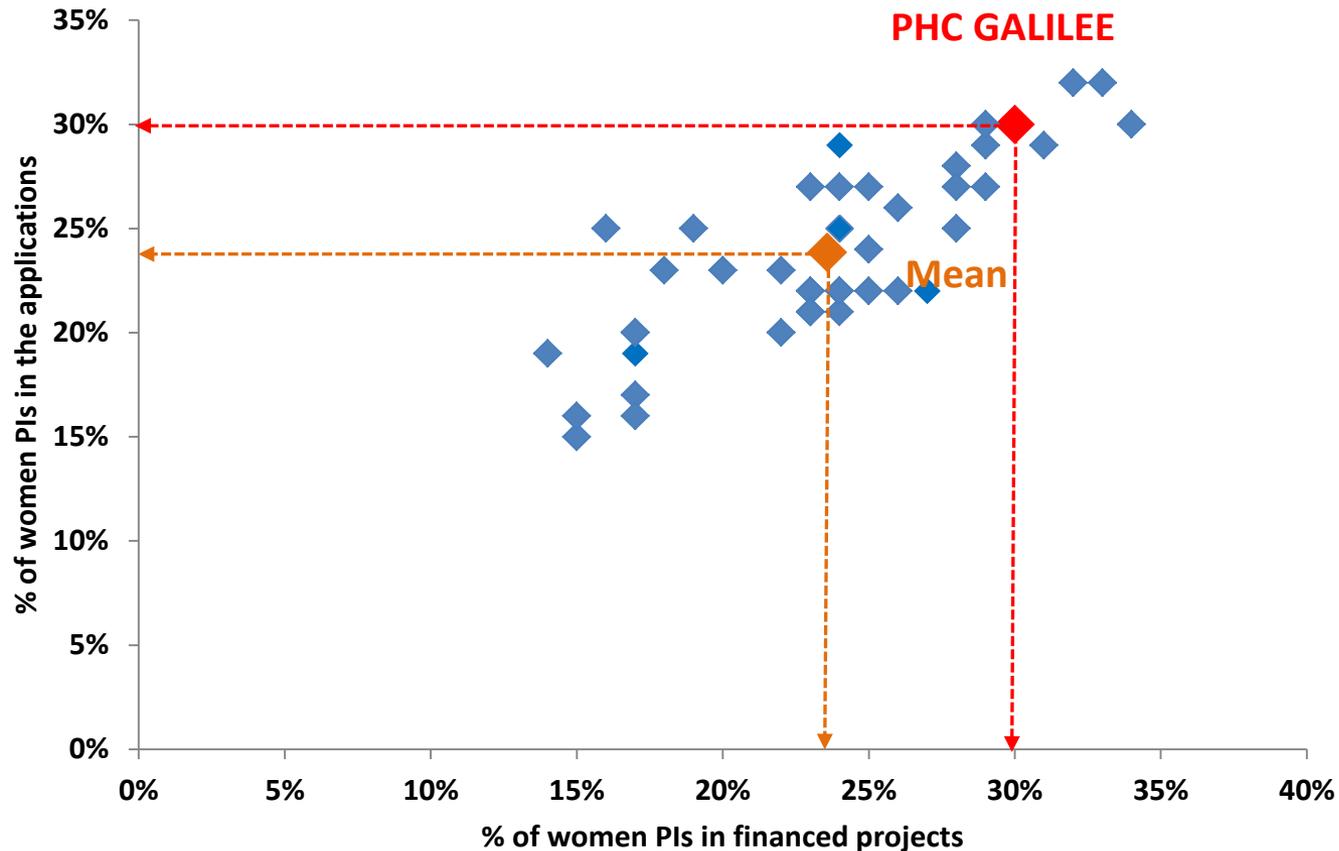


## Current professional status



# IMPLICATION OF WOMEN (FRANCE)

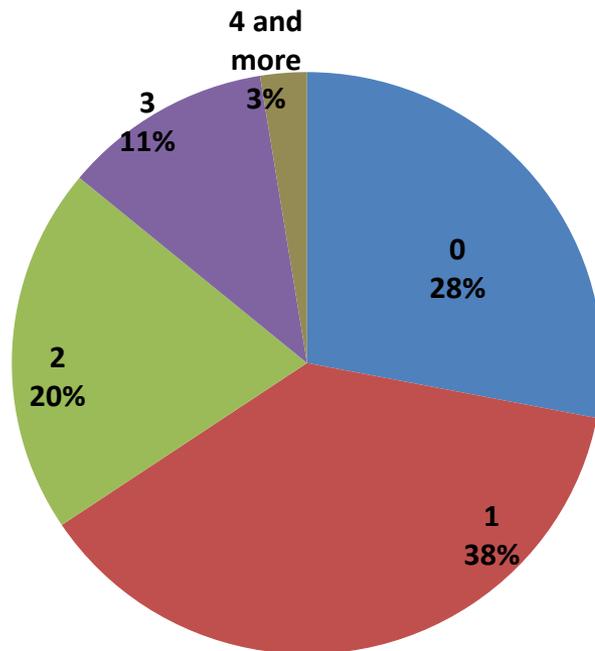
## (COMPARISON BETWEEN 42 DIFFERENT BILATERAL PROGRAMS)



**% of women PIs in the applications : 30% vs 24% mean**  
**% of women PIs in the selected projects : 30% vs 24% mean**

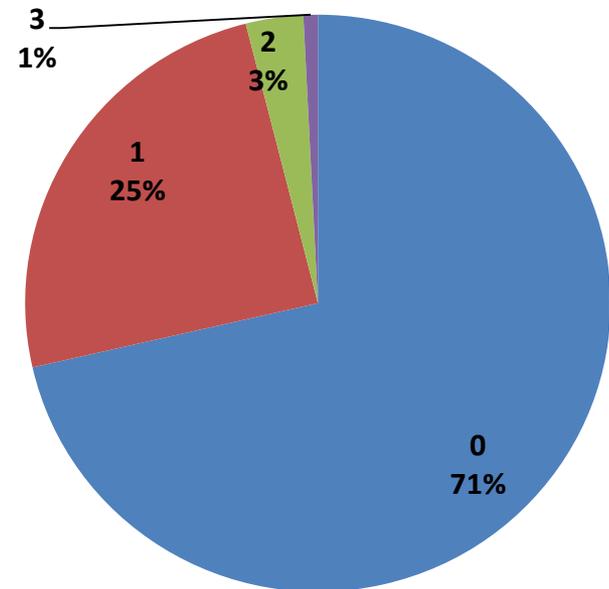
# PARTICIPATION OF FRENCH YOUNG RESEARCHERS

## Number of French PhD students



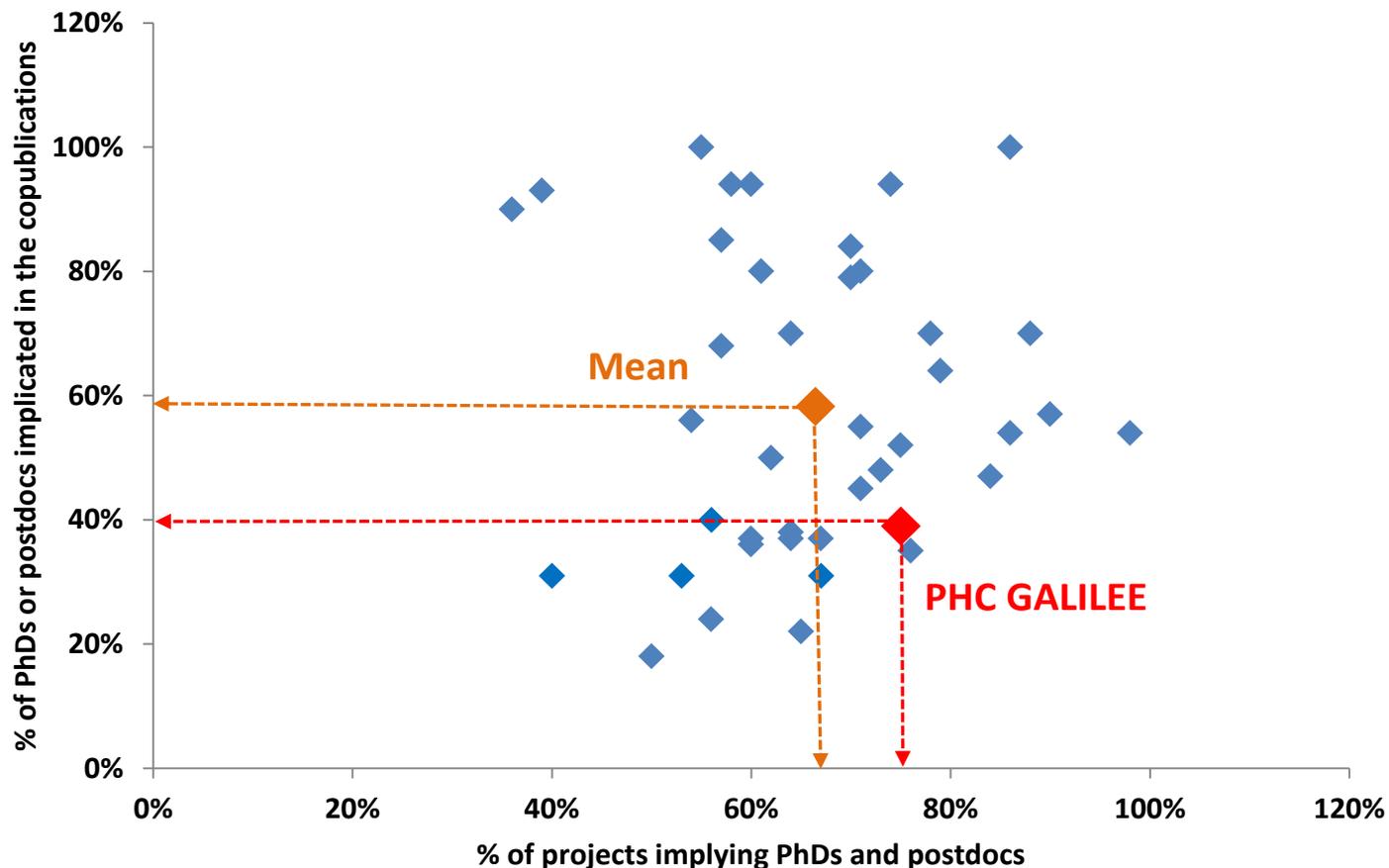
**65%** of projects involve at least one French PhD student

## Number of French post-doctoral researchers



**29%** of projects involve at least one French post-doctoral researcher

# IMPLICATION OF YOUNG RESEARCHERS (COMPARISON BETWEEN 42 DIFFERENT BILATERAL PROGRAMS)



**% of projects implying young researchers : 75% vs 66% mean**

**% of PhD or postdoc implicated in the copublications : 39% vs 58% mean**



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DE LA RECHERCHE  
ET DE L'INNOVATION

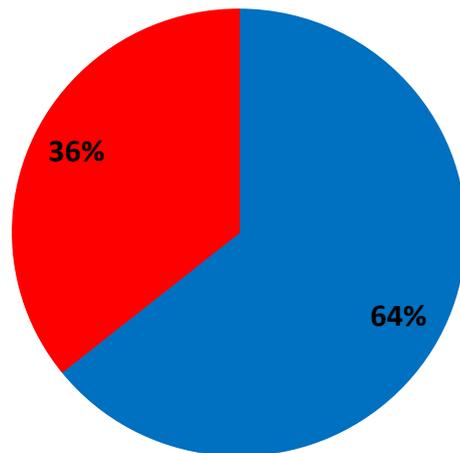
Data from 124 responses



# MOBILITY 2005-2019

# MOBILITY : GENDER DISTRIBUTION

France → Italia

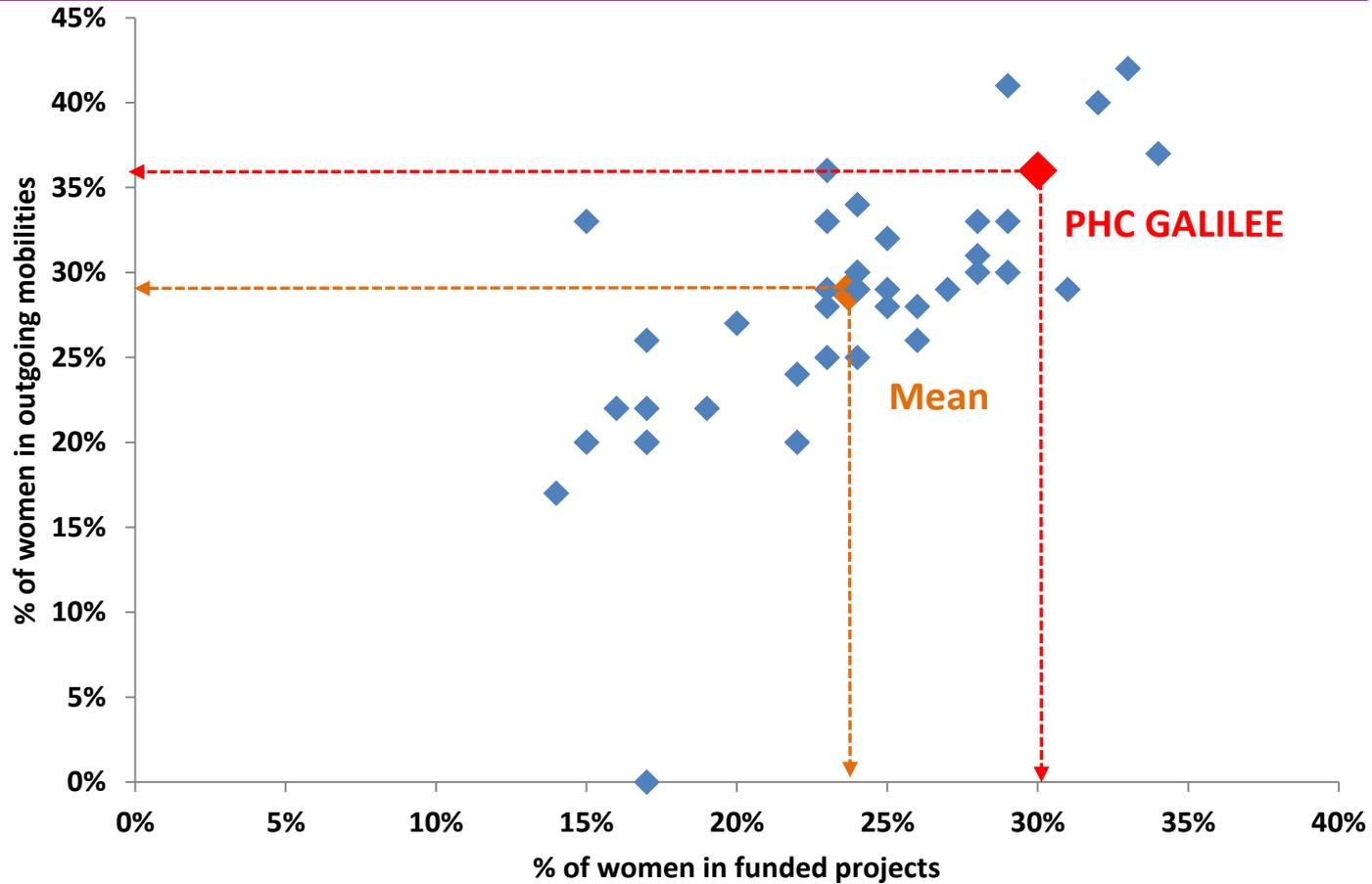


■ Men ■ Women

Data from 324 funded projects

# WOMEN MOBILITY FRANCE – ITALIA

(COMPARISON BETWEEN 42 DIFFERENT BILATERAL PROGRAMS)



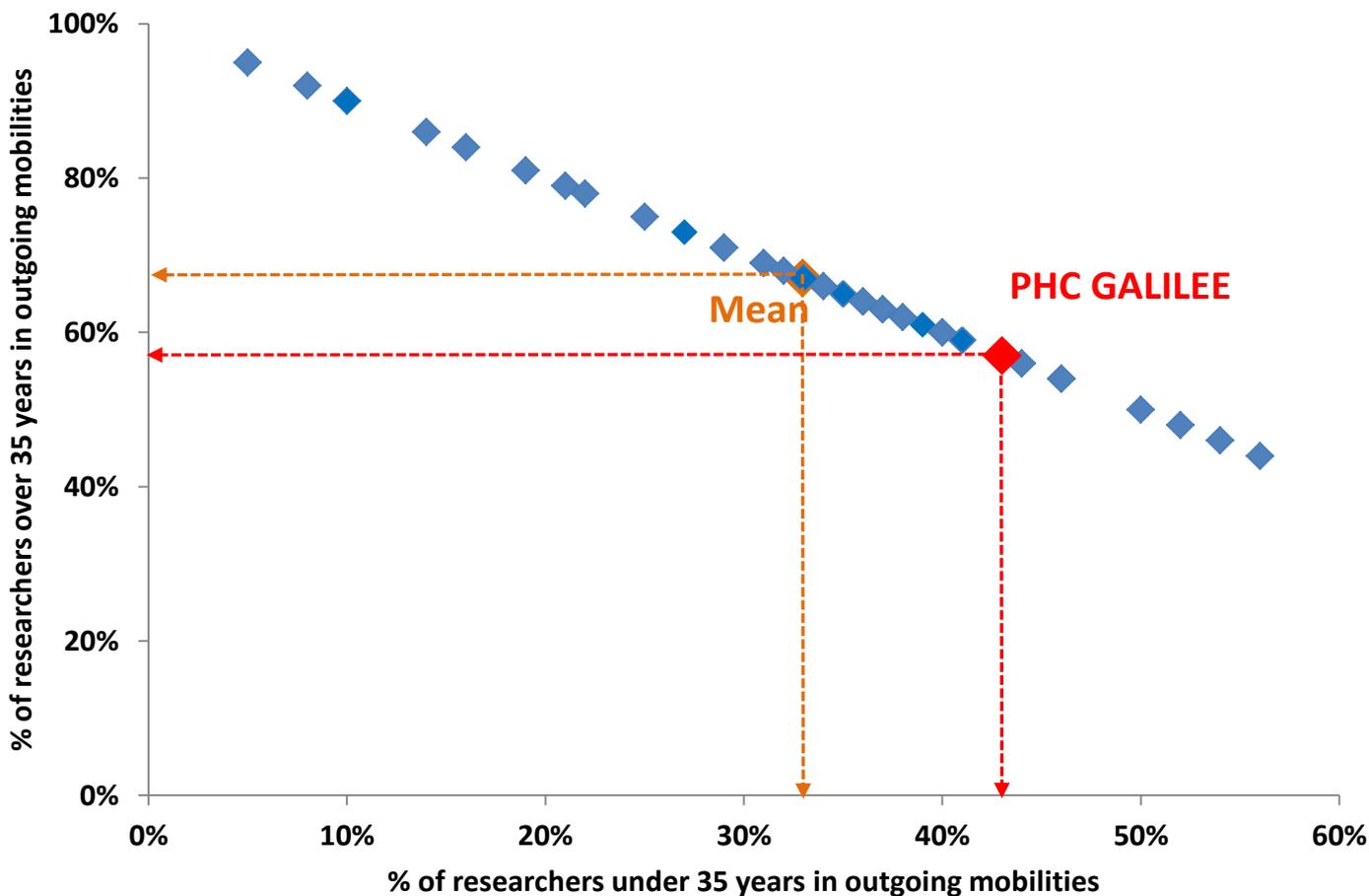
**% of women researchers in the selected projects : 30% vs 24% mean**

**% of women researchers in outgoing mobilities : 36% vs 29% mean**

# YOUNG RESEARCHERS' MOBILITY

## FRANCE - ITALIA

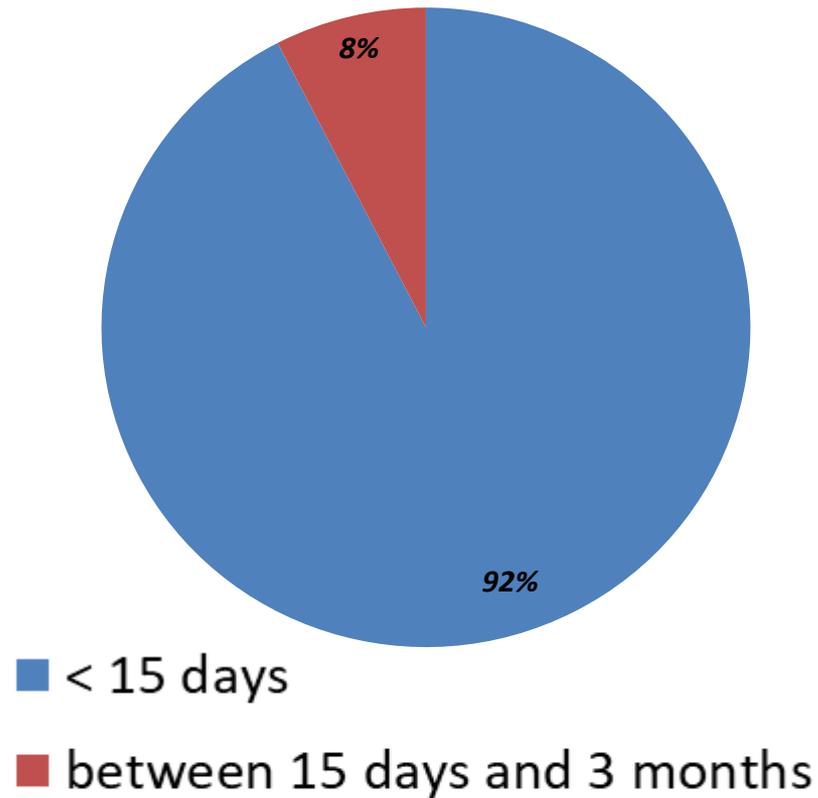
(COMPARISON BETWEEN 42 DIFFERENT BILATERAL PROGRAMS)



**% of French young researchers in outgoing mobilities : 43% vs 33% mean**

# MOBILITY : DURATION

## France → Italia



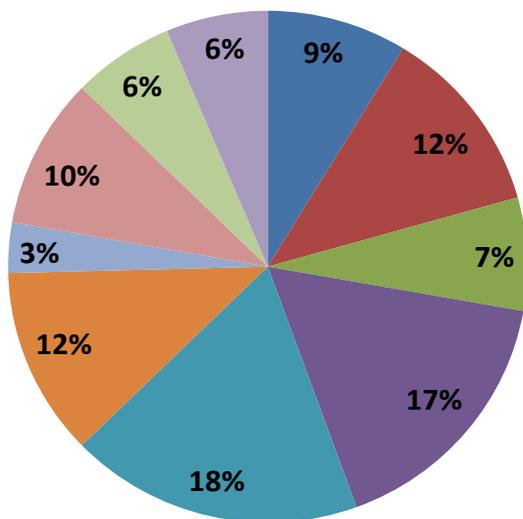


# SCIENTIFIC PRODUCTION 2005-2017

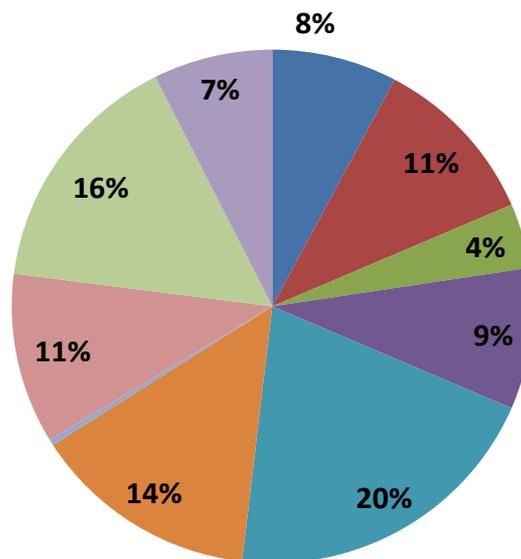


# SCIENTIFIC OUTPUT (1/2)

Funded projects with responses to the survey (126)



Percentage of copublications



- Mathematics
- Physics
- Marine/Earth/Planet Sciences
- Chemistry
- Biology and Health
- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy/Ecology

# SCIENTIFIC OUTPUT (2/2)

## Data from 126 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	11	1,91
Physics	15	1,93
Marine/Earth/Planet Sciences	9	1,22
Chemistry	21	1,14
Biology and Health	23	2,39
Humanities	15	2,53
Social Sciences	4	0,25
Engineering Sciences	12	2,42
Information Technology	8	5,25
Agronomy / Ecology	8	2,50
<b>TOTAL</b>	<b>126</b>	<b>2,14</b>

Overall average **annual** number of copublications per project : **1,07 vs 0,92 mean**

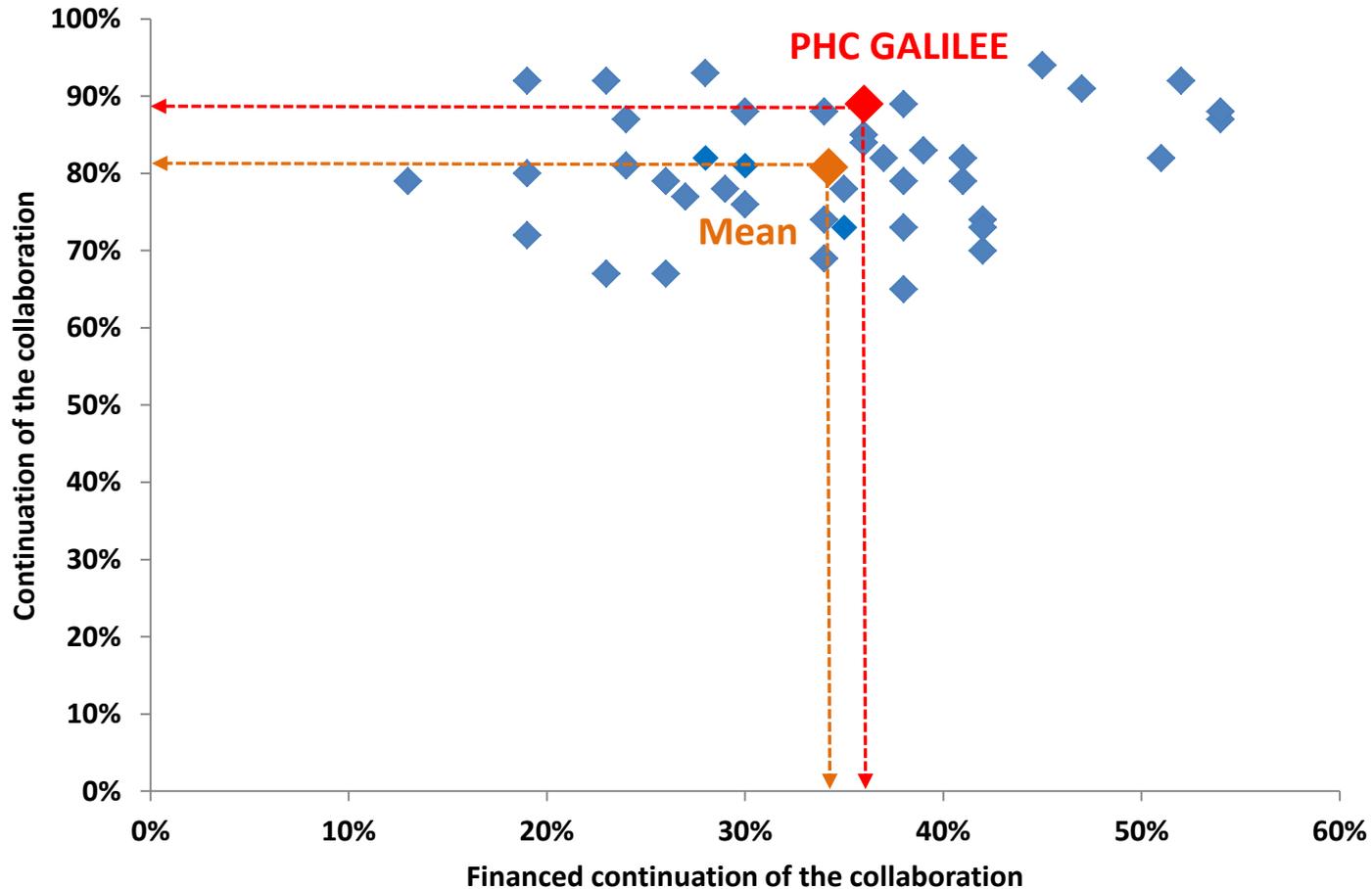
**67%** of funded projects led to one co-publication at least

**37%** of copublications include at least 1 PhD or PostDoc

The average annual rate of publication for young researchers involved in the projects is **0,35**

# WHAT HAPPENS AFTER A GALILEE PROJECT ?

# CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 42 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : **89% vs 81% mean**

Continuation of the collaboration with other sources of subvention : **36% vs 34% mean**

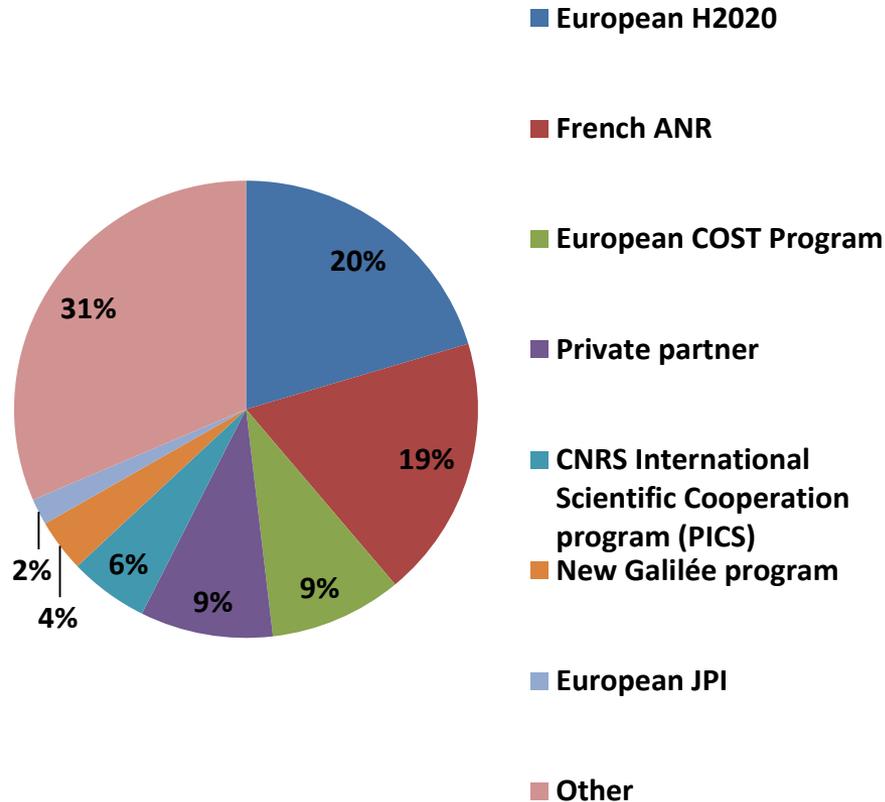
## CONTINUATION OF THE COLLABORATION (2/5)

**89%** of the collaborations continued after the Galilée project

Which activities?	
Collaborative research	68%
Co-publications	60%
Researchers' mobility	47%
Joint participation to conferences	47%
PhD mobility	30%
Co-organisation of scientific events	26%
Joint participation to PhD thesis	15%
Joint diplomas	4%
Other	11%

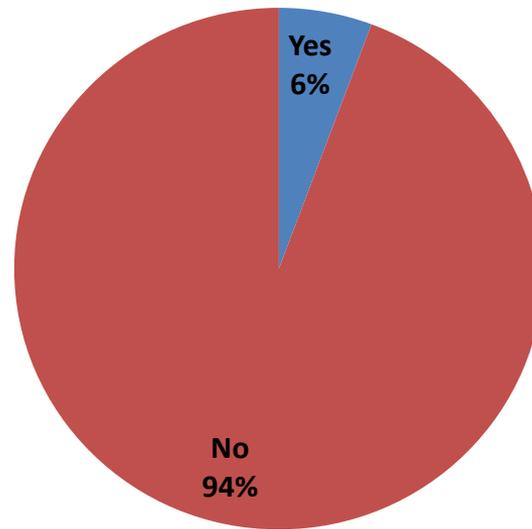
# CONTINUATION OF THE COLLABORATION (3/5)

## What kind of funded collaborations after the Galilée project ?



# CONTINUATION OF THE COLLABORATION (4/5)

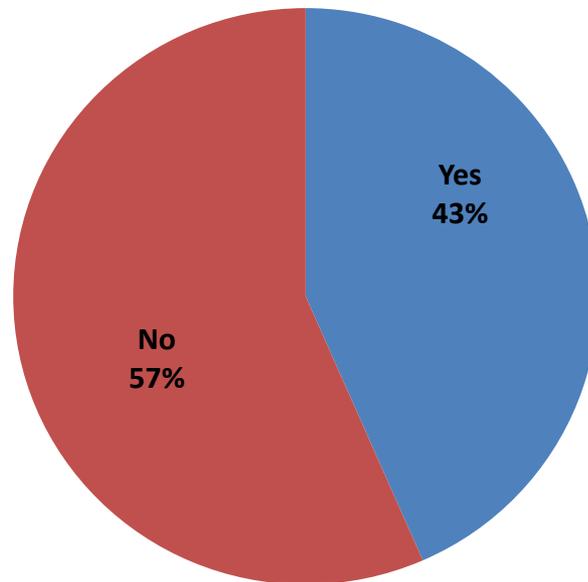
Has the Galilée project led to the set-up of joint structures?



2 CNRS International Associated Laboratory (LIA)  
1 CNRS International Research Network (IRN)

# CONTINUATION OF THE COLLABORATION (5/5)

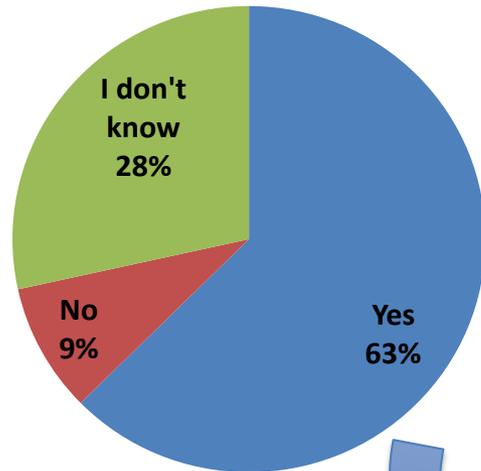
Has the French-Italian collaboration involved new partners?



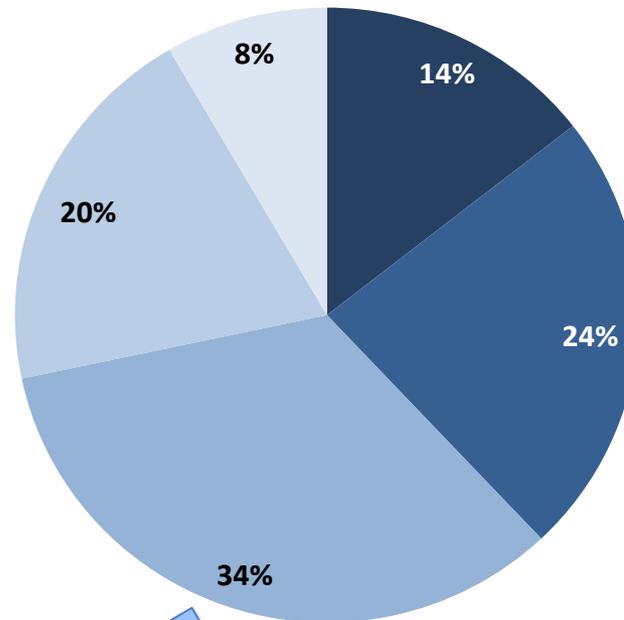
For a total of 105 new partners from 38 different countries

# IMPACT ON FRENCH YOUNG RESEARCHERS' CAREER (1/2)

## Was french young researchers' career impacted by the Galilée program ?



## Type of impacts



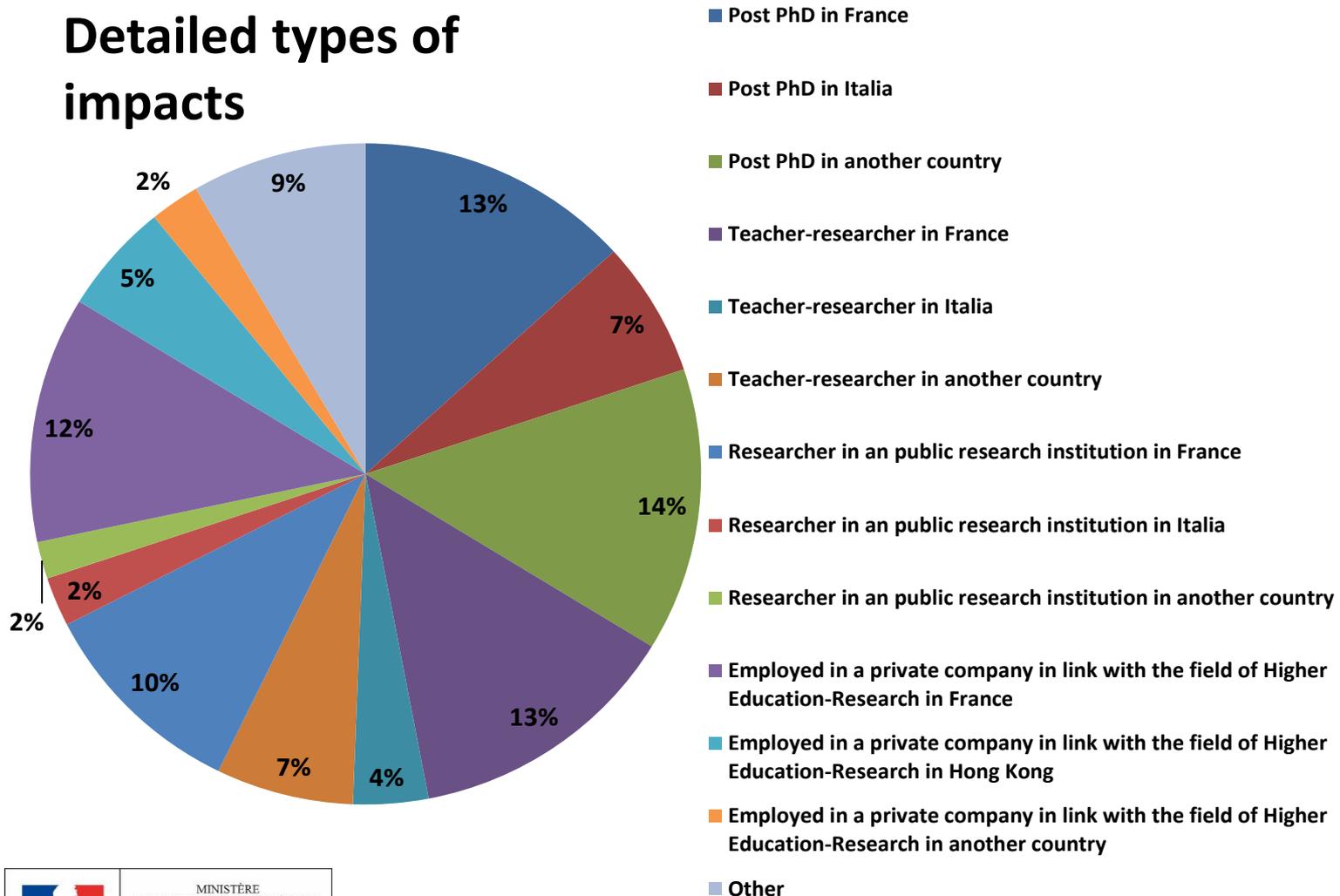
- Researcher in a public research institution (permanent position)
- Teacher/Researcher (permanent position)
- Postdoc/Teacher/Researcher (temporary position)
- Employed in a private company in link with the field of Higher Education - Research
- Other

Data from 123 responses

Data from 77 positive responses for a total of 166 french young researchers

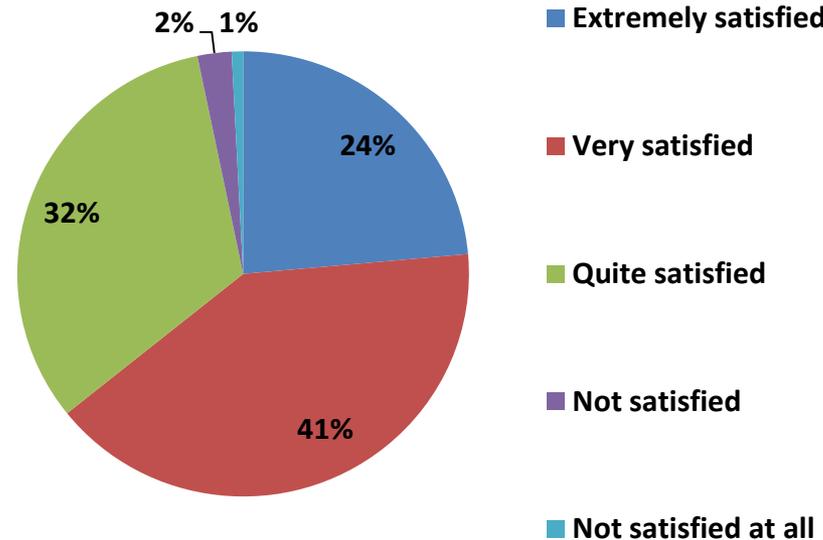
# IMPACT ON FRENCH YOUNG RESEARCHERS' CAREER (2/2)

## Detailed types of impacts



# GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

**97%** of French principal investigators are satisfied



Data from 123 responses

# GENERAL OPINION OF FRENCH PIS ON THE PROGRAM (2/3) POSITIVE COMMENTS

## SURVEY OF 124 FUNDED PROJECTS



Strengths of this program	Number of occurrences (out of 648)	% (out of 124)
Fostering researchers' mobility	97	77%
Fostering an international research collaboration	91	72%
Fostering exchanges enabling scientific production	78	62%
Simplicity of the project application process	73	58%
Fostering the training of young researchers	73	58%
Easy implementation (administrative flexibility)	47	37%
Sufficient financial means for the mobility costs	38	30%
Helpful to initiate other fundraising	30	24%
Helping to know the partner country	29	23%
Financial autonomy towards your institution	27	21%
Good scientific-added value on financial investment	22	17%
Sufficient amount of mobility time given to collaborate	20	16%
Sufficiently long duration of the projects	12	10%
Transparency of the selection process	5	4%
Timetable for implementation	3	2%
No strenght point	2	2%
Other	1	1%
<i>Total number of occurrences</i>	<i>648</i>	

# GENERAL OPINION OF FRENCH PIS ON THE PROGRAM (3/3) NEGATIVE COMMENTS

## SURVEY OF 122 FUNDED PROJECTS



Weaknesses of this program	Number of occurrences (out of 134)	% (out of 122)
Insufficient financial means to cover a project	71	56%
Length of support too short	60	48%
Difficult to continue the collaboration	33	26%
Lack of transparency in the selection process	32	25%
Financial means insufficient for the expenditure of mobility (per diem)	25	20%
Too short duration of mobilities	25	20%
Financial means insufficient for the expenditure of mobility (transport)	24	19%
Insufficient communication on the evaluation's results	16	13%
Too low number of mobilities	16	13%
Heaviness of the process of applications	14	11%
Timetable for implementation	11	9%
Administrative heaviness of the missions management	8	6%
No weakness	7	6%
Financial autonomy towards your institution	2	2%
Flexibility of the program for actions co-financed with the partner	1	1%
Too long duration of mobilities	0	0%
Other	6	5%
Number of occurrences	351	

# PRELIMINARY CONCLUSIONS

Preliminary conclusions suggest that the funding scheme has efficiently contributed to create (or to maintain) fruitful and long-term cooperation, despite the relatively low financial support, which is to be considered as “seed money”.

34% of the applicants are under 40 years, a score better than the general mean (22%)

Implication of women PIs in the applications and the selection (30%) better than the general mean (24%)

Implication of French young researchers in 75% of the projects better than the general mean (66%)

Implication of French young researchers in the mobilities (43%) better than the general mean (33%)

Scientific coproduction better than the general mean

20% of sustained funded collaborations through H2020 programs and 19% through ANR programs

**Beware of the recent decrease in the number of applications**

**67% of the PIs have already collaborated with Italia but only 31% of them have already benefited from a Galilée program**

**25% of the funded projects do not imply any young researcher**

**33% of funded projects with no eligible co-publications**

**Only 37% of co-publications involve a french young researcher**

**Only 36% of sustained funded collaborations after the project**

# PRELIMINARY RECOMMENDATIONS

- **Try to make the call for offer more appealing**
- **Promote newer cooperations between France and Italia**
- **Encourage French PIs to increase the implication of young researchers in the projects**
- **Encourage French PIs to increase the implication of young researchers in the co-publications**
- **Increase the number of co-publications**
- **Consider a “GALILEE +” program to help PIs at the end of their financing to apply to international programs ?**

French national ministries (MESRI / MEAE) will provide a complete analysis of the survey. It will be sent to the recipients of the funding and participants in this symposium.

## CONTACTS

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*Thank you for your attention*