



7²⁰²¹
DÉCEMBRE

RENTRÉE DOCTORALE

LILLE
GRAND PALAIS



RENTRÉE DOCTORALE

Frédéric Parol, Director
Véronique Riffault, Deputy-Director
Christophe van Brussel, Coordinator
Betty Figula, Administrator, Secretary
Céline Gloanec-Diot, seconded from Doctoral Affairs of ULille



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***Kick-off meeting
2021-2022***

Rooms 13 & 17, Building P5
Lille University – Faculty of Sciences and Technology
Cité Scientifique
59655 Villeneuve d'Ascq Cedex
Tel: +33 3 20 43 40 62

Un événement organisé par :



En partenariat avec :



Avec le soutien de :



- 7 « Thematic » Doctoral Schools (DS or ED in french), regional, multi-institutional :
 - ED 73 SESAM : Sciences Economiques, Sociales, de l'Aménagement et du Management (Economic, Social, Planning and Management Sciences)
 - ED 74 SJPG : Sciences Juridiques, Politiques et de Gestion (Legal, Political and Management Sciences)
 - ED 473 SHS : Sciences de l'Homme et de la Société (Human and Social Sciences)

 - ED 631 MADIS : Mathématique, Sciences des données (Mathematical and Digital Sciences)
 - ED 632 ENGSYS : Ingénierie et Systèmes (Engineering and Systems)
 - **ED 104 SMRE : Sciences de la Matière, du Rayonnement et de l'Environnement (Sciences of Mater, Radiation and Environment)**
 - ED 446 B&S : Biologie et Santé (Biology and Health)
- The « **Collège Doctoral Lille – Nord de France** », place of **mutualization** and **coordination** between the 7 EDs (<https://doctorat.univ-lille.fr/college-doctoral/>)
 - The « **Département Carrières et Emplois** » (DCE), pooling of non-disciplinary training initiatives, in particular those aimed at **the pursuit of PhD careers** (Doctoriales, DocEmploi, Challenge Doc, ...)
 - The « **Département Actions Internationales** » (DAI), to promote **internationalization**, with 2 annual calls for tenders for mobility funding grants, PhD Welcome, visiting professors

A BIT OF STORY

1992 : Mater and Radiation Sciences (chemistry + physics)

2000 : SMRE (current disciplinary contours + Earth Sciences, Ecology, Biotechnologies)

2006-2007 : Implementation of regional DSs : co-accreditation of ULCO and Artois Universities

2009 : Start of the PRES structure (Pôle de Recherche et d'Enseignement Supérieur)

2014 : PRES => ComUE (Communities of Universities and Institutions) Lille Nord de France

Period 2015-2019

2016 : co-accreditation UVHC (=> UPHF, Valenciennes University), Centrale Lille, IMT Lille Douai

2018 : Merging of Lille1, Lille2 and Lille 3 => Univ Lille

Period 2020-2024

2020 : The GRAEL project is selected and the Graduate Programmes start

2020 : ULCO and Artois Universities leave SMRE and join STS DS in Amiens

2021 : UPHF leaves SMRE and builds its own DS

POSITIONING OF THE SMRE DS IN THE DOCTORAL TRAINING OFFER (2019)

Doctoral School	U Lille	UPHF	CLI	IMT	TOTAL	% of registrations	% of defences
SHS	494	83			577 registrations	25,25%	
	66				69 defences 2019		14,1%
SESAM	199	5			204 registrations	8,6%	
	31				31 defences 2019		6,6%
SJPG	224	17			240 registrations	10,1%	
	22	1			22 defences 2019		4,7%
B&S	340				340 registrations	14,3%	
	90				90 defences 2019		19,2%
SMRE	290	14	29	29	362 registrations	15,2%	
	85	1	1	13	100 defences 2019		21,4%
SPI (ex MADIS & ENG SYS)	402	116	100	37	655 registrations	25,5%	
	126	14	13	6	159 defences 2019		34%
Total	1949	235	129	66	2379 registrations		
	420	15	14	19	468 defences 2017		

SMRE DS : 15,2% of registrations, 21,4% of PhD defences

SMRE DS : A MULTIDISCIPLINARY SCHOOL

3 co-accredited **institutions**: Univ Lille, Centrale Lille Institut, IMT Nord Europe

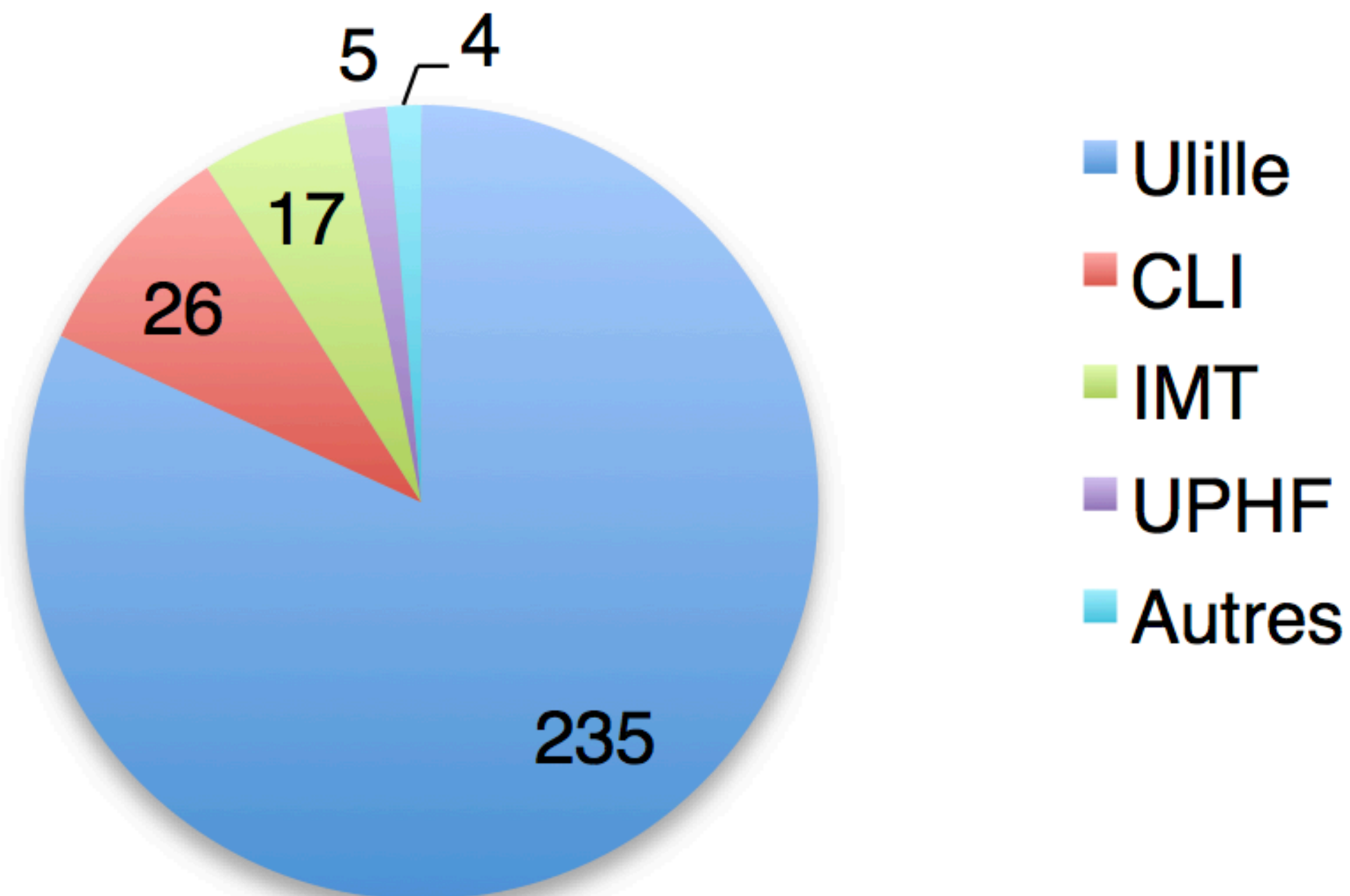
=> **they award the degree of doctor**

Doctoral potential and scientific support for SMRE

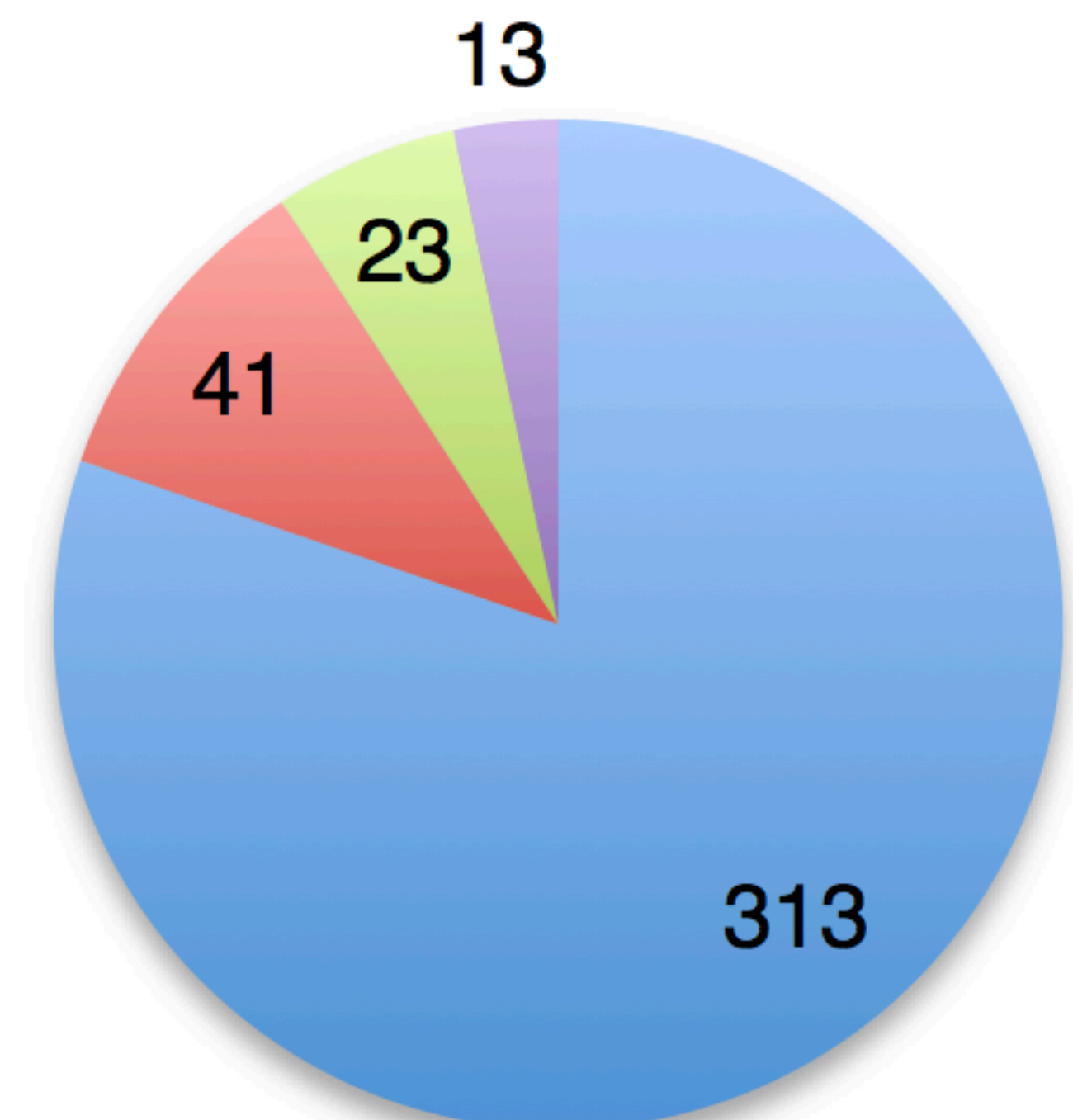
13 research laboratories (2 Labex (Laboratoire of Excellence): Cappa, Cempi; 3 Institutes : Chevreul, Physique, IRePSE; Hub2 of the I-SITE project)

In 2020 : 500 scientists including **287** Habilités à Diriger des Recherches (HDR)

HDR per institution



PhD students per institution



REVIEW FOR 2020

Total number of PHD students : **390**

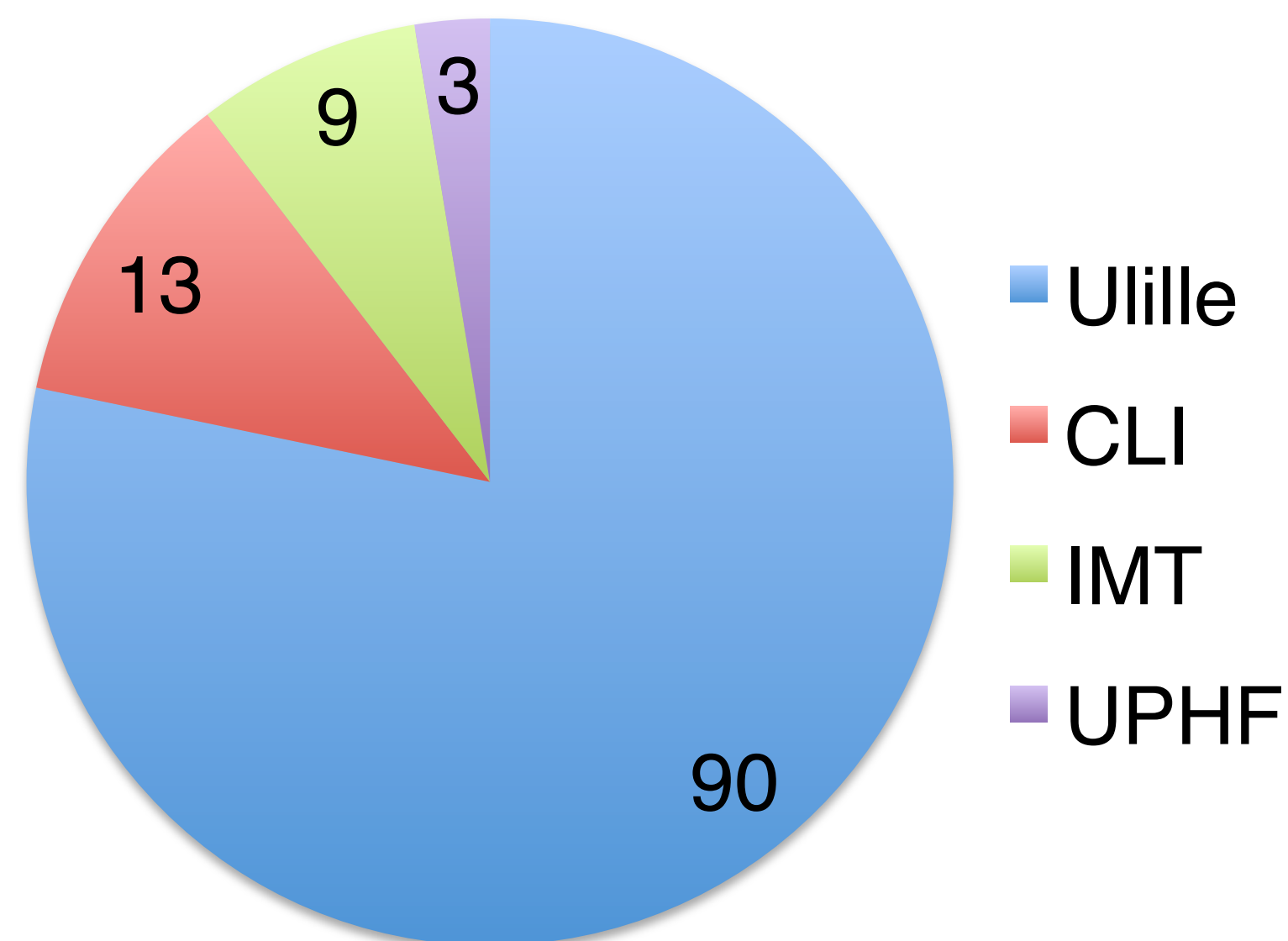
Ratio M / **F** : 52,3% / **47,7%** (64% / **36%** in 2013, 57% / **43%** in 2009)

Thesis flow

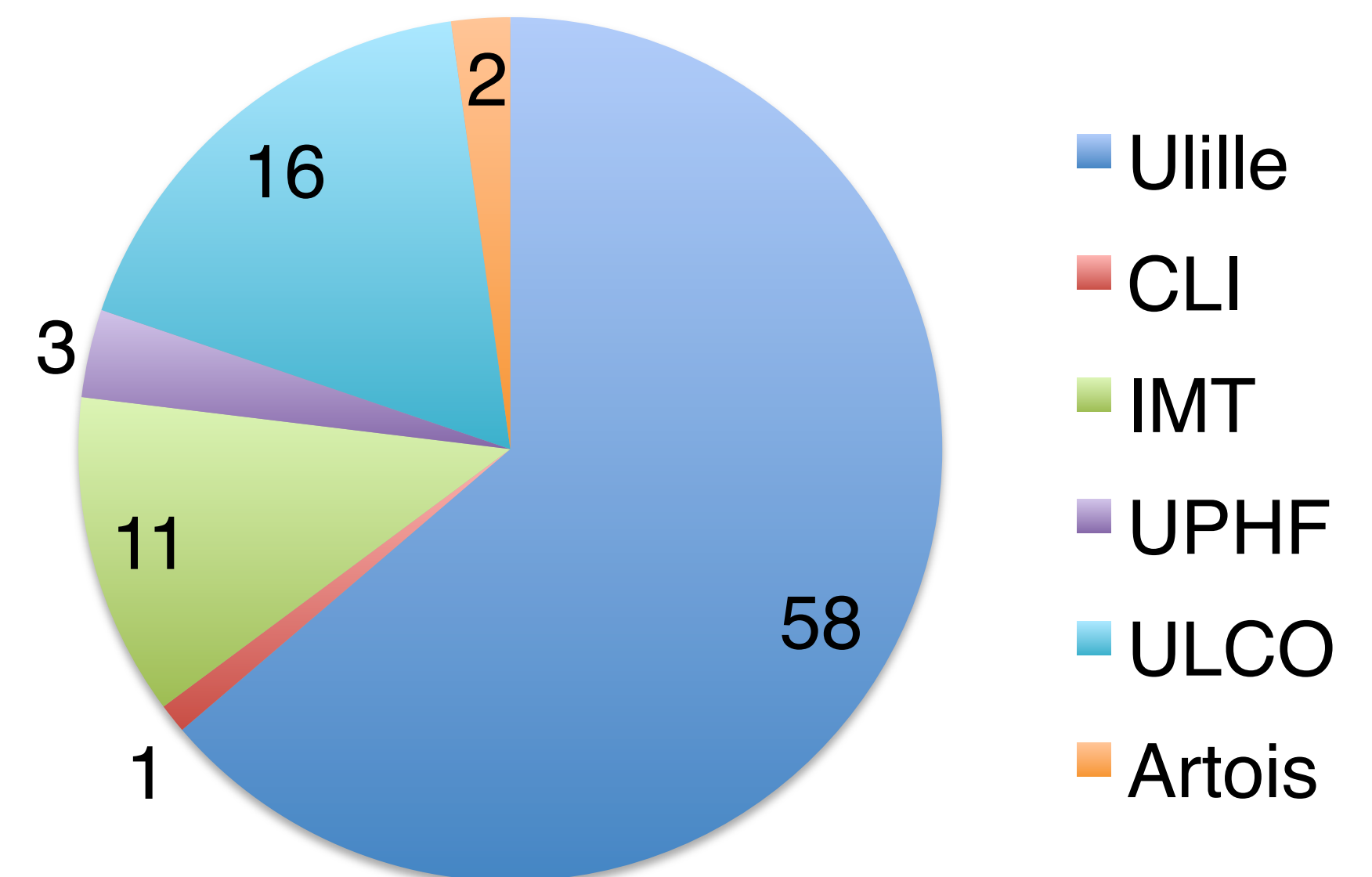
First registrations : **115** (136 in 2019, 128 every previous 5 years)

Defences : **91** (128 in 2019, 114 every previous 5 years)

First registration in 2020



Defences in 2020



REVIEW FOR 2020 (continued)

International PhD students : **56,5%** (58% in 2019, 50% in 2013)

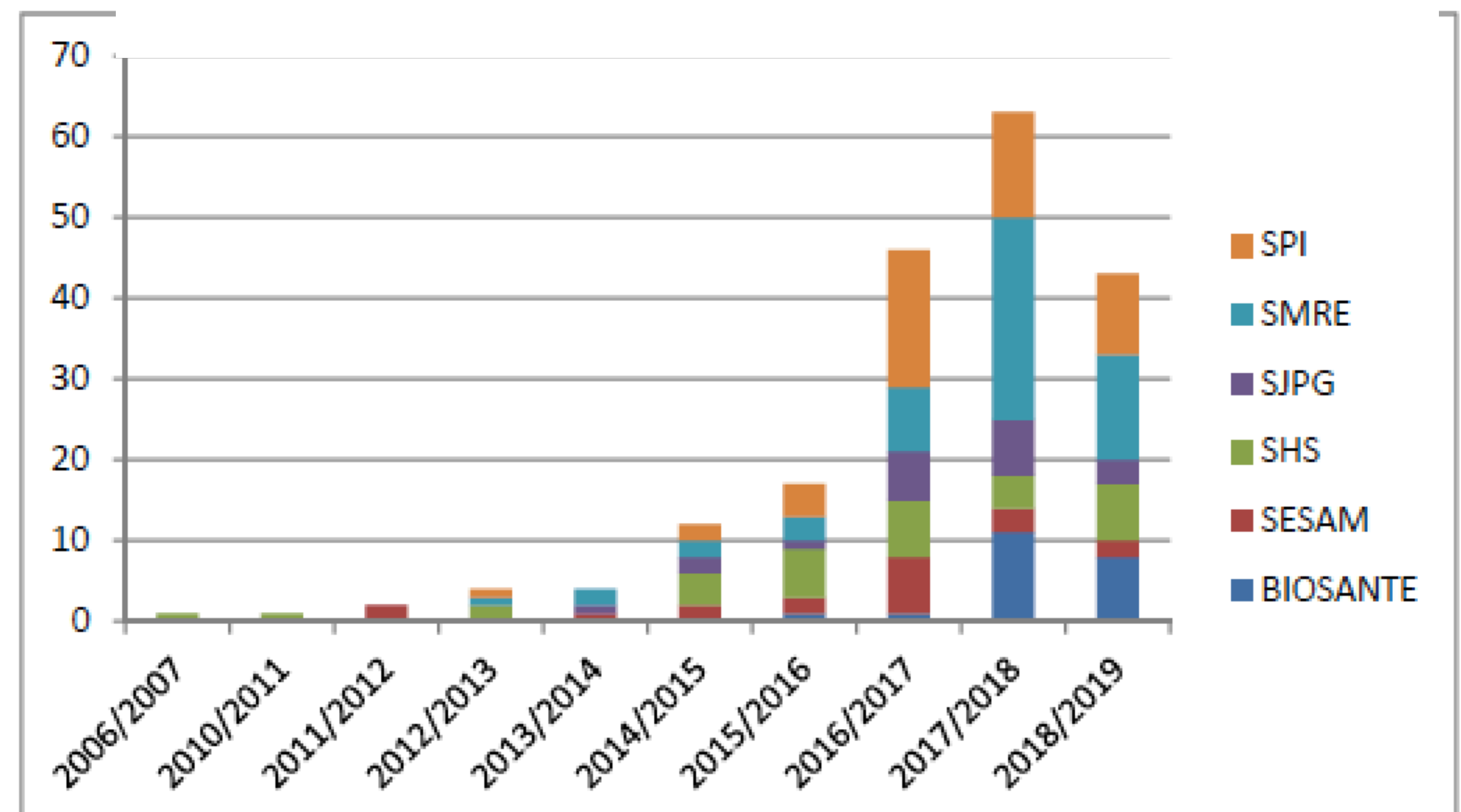
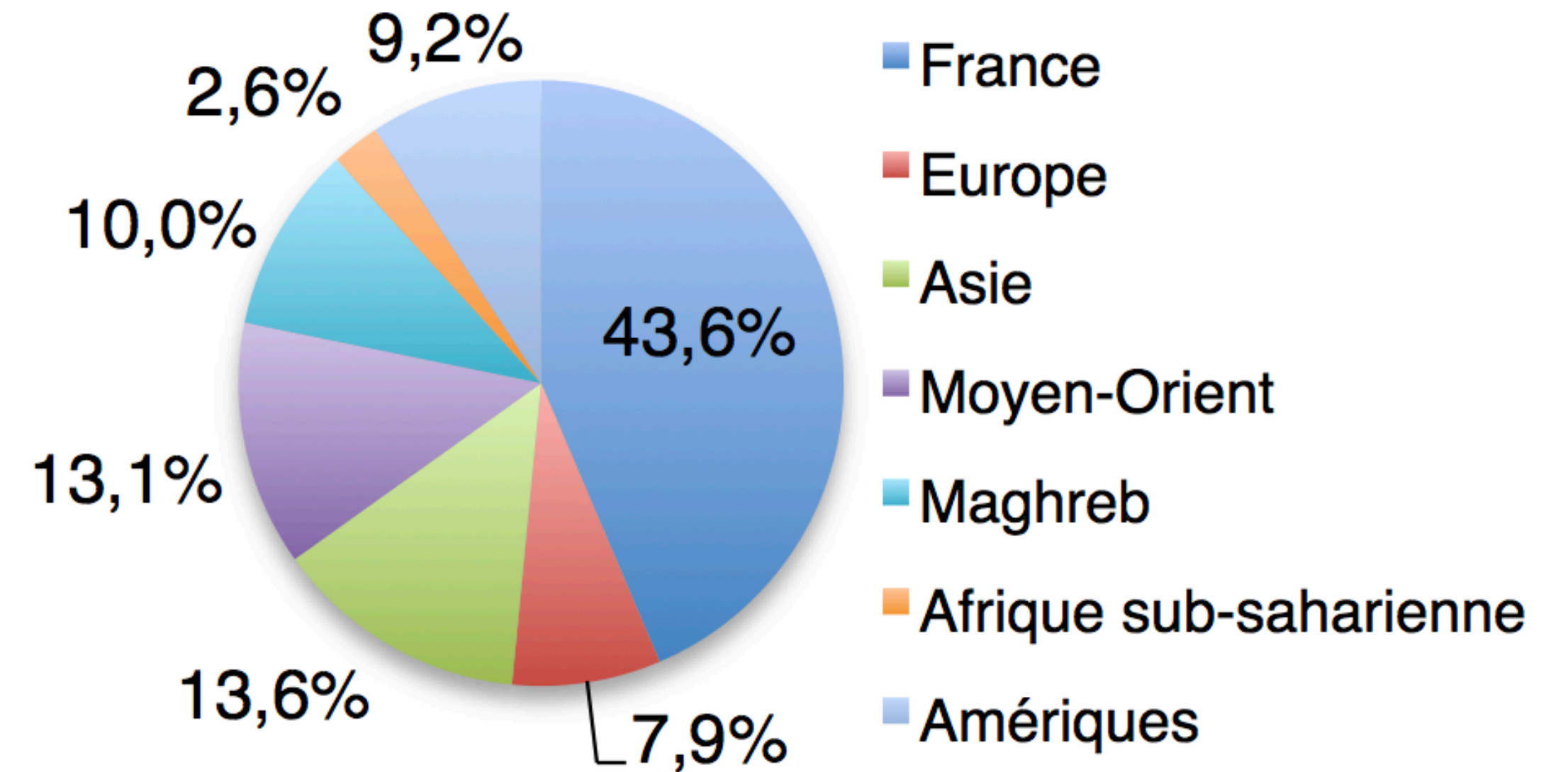
Fundings/types of contract

Public law PhD contract: **74**

CIFRE (contract with a company): **8**
(25 out of all PhD students)

Co-supervision with a foreign partner : **21**
(81 out of all PhD students)

**Number of co-supervision
thesis at ULille**



THE DOCTORAL SCHOOL COUNCIL
Ministerial order of 25 May 2016 relating to doctoral training

it was renewed this year

The Council is composed of 25 members:

- 13 laboratory representatives including 8 Directors of Doctoral Studies (DED)
- 2 representatives of the technical and administrative staff
- 5 PhD student representatives
- 5 external personalities from the scientific or socio-economic sectors

Permanent invited members :

- 4 representatives for co-accredited institutions (Deputy President for Research or equivalent)
- 1 representative of the Doctoral College

The doctoral school council adopts the doctoral school's action programme

YOUR REPRESENTATIVES IN THE DS COUNCIL

Your representatives

Name	Firstname	Lab/Institution
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Sakael	Clément	UMET, Centrale Lille
Meunier	Mathias	EEP, ULille
Beaudor	Maxime	ICV, ULille
Ventura	Mégane	LOA, ULille
Delpierre	Pauline	PhLAM, ULille

Alternate representatives

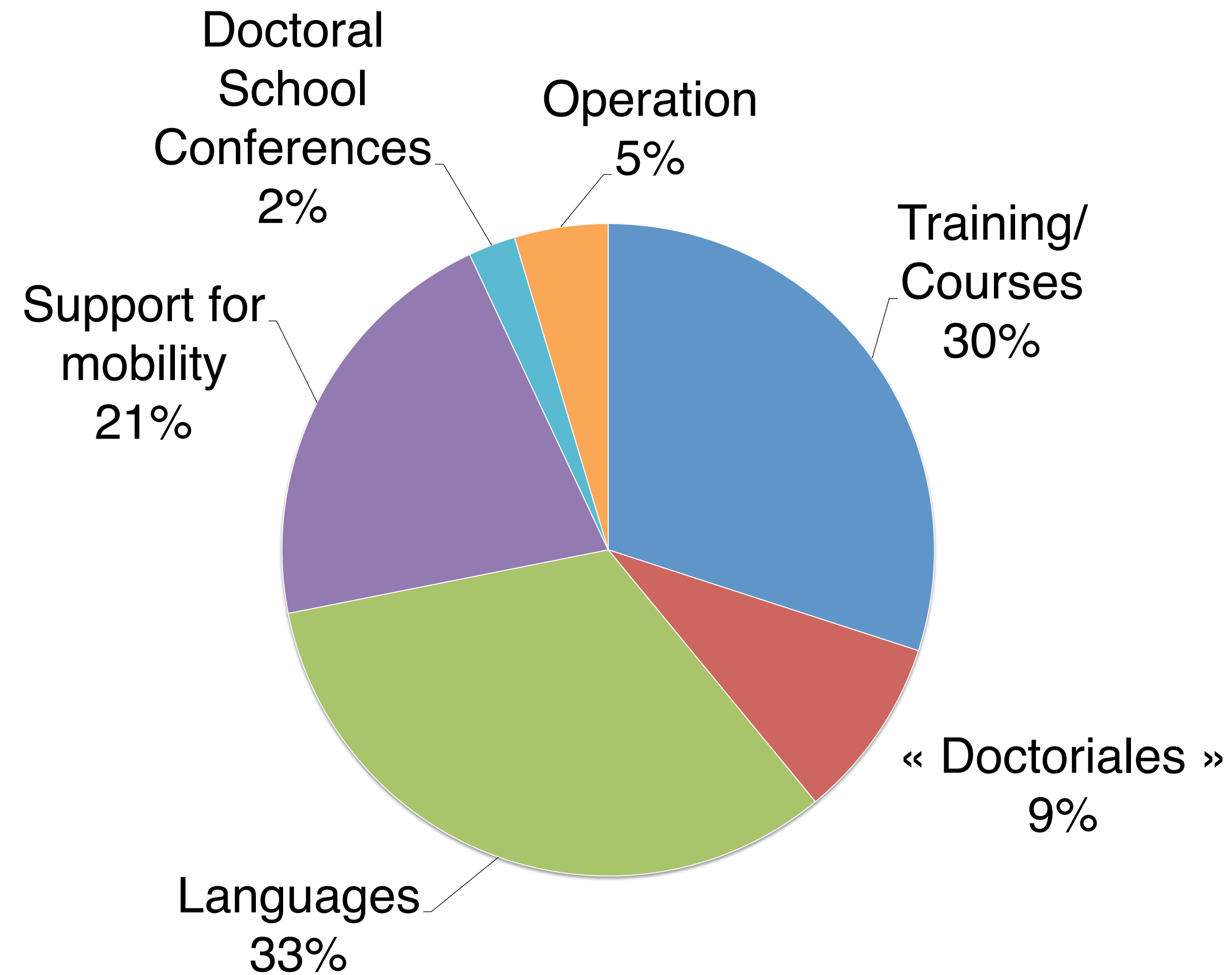
Name	Firstname	Lab/Institution
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Mountadir	Soukaina	UCCS, Centrale Lille
Montroussier	Nicolas	UCCS, ULille
Pelus	Angeline	ICV, ULille
Peroni	Raphael	LOA, ULille
Samsoen	Simon	UMET, ULille

THE RESOURCES ALLOCATED TO THE DOCTORAL SCHOOL

- Human resources :
 - 1 (full-time) assistant engineer (C. Van Brussel)
 - 1 part-time (50%) technical assistant (B. Figula)
- Buildings and technical resources :
 - ⇒ Pedagogical Secretary: Rooms 13 & 17, Building P5, Campus Cité Scientifique, Villeneuve d'Ascq
 - ⇒ Correspondents with the Institutions/Office of Doctoral Affairs (Univ. Lille, IMT, CLI)
 - ⇒ Web site, mailing lists : PhD students, supervisors, DS Council, laboratory directors, etc...
- Financial resources :
 - ⇒ About 150€ /year/PhD student given by U Lille, IMT, CLI
 - 57,500€ in 2020 for about 360 enrolled PhD students

EXPENSES OF THE DOCTORAL SCHOOL (2014-2019)



THE MISSIONS OF THE DOCTORAL SCHOOL

- **Recruit doctoral students and ensure the follow-up of the thesis**
 - Thesis funding
 - Recruitment of PhD students
 - Follow-up of PhD students

- **Organising doctoral training and international outreach**
 - Training plan
 - Doctoral life and mobility support

- **Preparing for the continuation of PhD's career**
 - Training of the Doctoral College
 - Doctoriales, ChallengeDoc, DocEmploi,... (refer to « Startdoc » conference)

RECRUITMENT OF PHD STUDENTS : RESEARCH GRANTS

Every year :

More than 25 research grants from co-accredited universities and institutions :

- 20-22 (Univ Lille) ; 2,5 (CLI) ; 1 (IMT)

Research grants co-financed by local and regional authorities :

- 20-25 co-funding by the Hauts de France Region

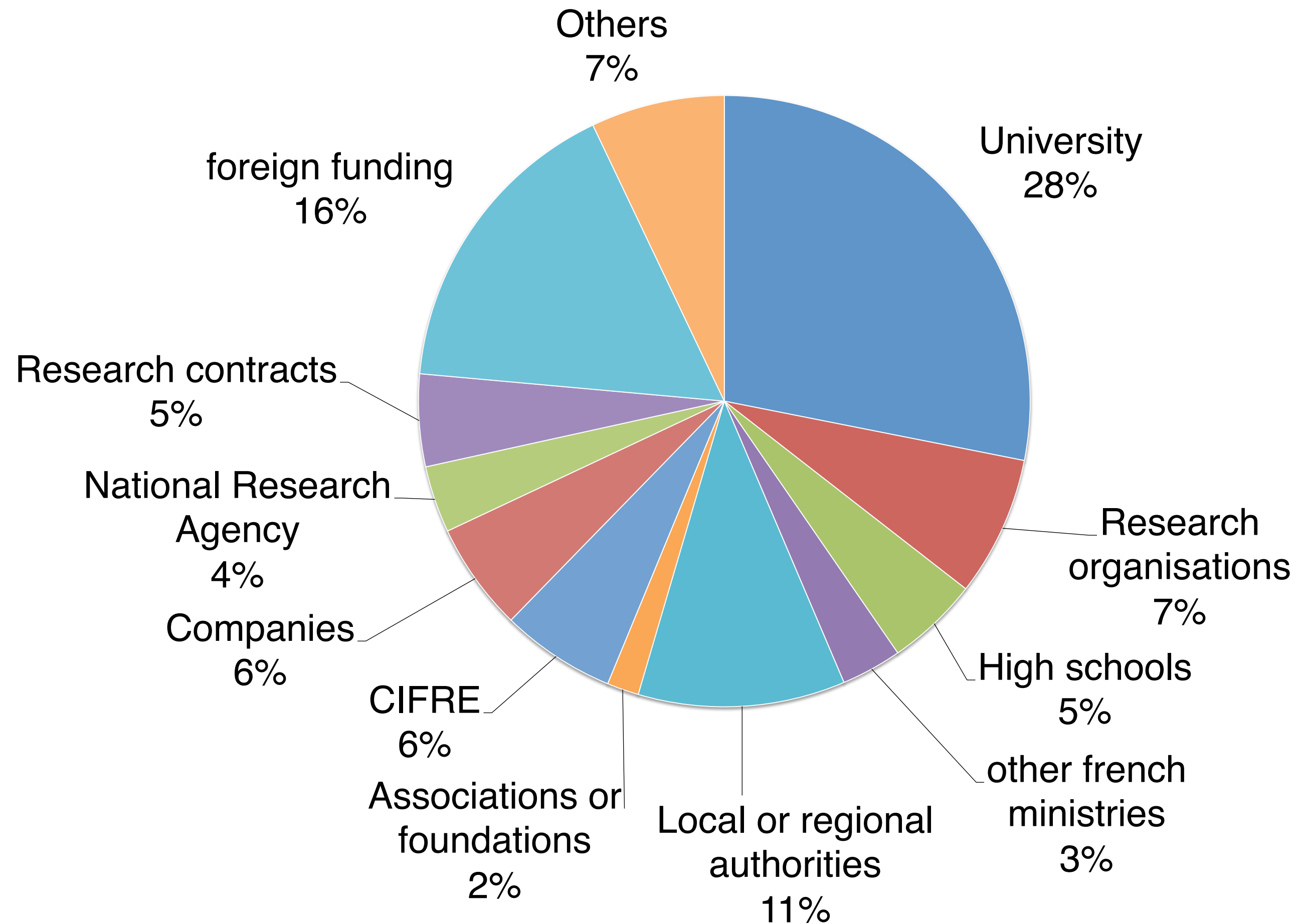
Others :

ERC, ANR, CIFRE, Companies, ADEME, DGA, CNES, research contracts, international funding, embassy scholarships,...

I-SITE : Pearl Programme (Cofund EU/I-SITE), Co-tutorship programme (Kent, Gand)

AI Programs of ULille and CLI

PhD THESIS FUNDING



Funding is mandatory for registration

~ 50 % of PhD students are enrolled under the Public law Doctoral Contract system.

doctoral contract (decree of 04/23/2009, fixed-term public law employment contract, 36 months)

THE SELECTION PROCEDURE OF CANDIDATES FOR INSTITUTIONAL AND LOCAL AUTHORITIES THESIS GRANTS

Identification of PhD thesis topics (January-April) :

- List of high priority subjects for laboratories
- Call for proposals from the Hauts de France Region
- Preparation of applications for "Labelised" grants when applicable
- Posting of topics via the Doctoral School website and laboratory websites
- Search for candidates by laboratories
- maximum 3 candidates per subject and 3 subjects per candidate

Selection of candidates by open competition (June) :

- Pre-selection in the laboratories to rank the applications
- Selection of candidates by the Doctoral School Council (main list + supplementary list)

SUPPORT FOR PHD STUDENTS

Monitoring of the supervision rate : per HDR, no more than 5 supervised or co-supervised theses (average: 1.26 PhD students / HDR).

First enrolment : Enrolment interview, Doctoral Charter, Training Egreement (PhD Student + Supervisor + Laboratory Director + Director of Doctoral Studies (DED) + Doctoral School Director)

Kick-off meeting of the new academic year : presentation of the Doctoral School, presentation of the training courses and the doctoral course in coordination with the Doctoral College

Each time you re-register : individual interview with the Director of Doctoral Studies (DED) of your scientific domain, annual validation of the training credits

Thesis monitoring : individual monitoring committee (end of 1st year and end of 2nd year)

Authorisation to undertake the defence process: final interview with the DED, closure of the training plan, then proposal of reviewers and jury in the ADUM application software.

Mediation procedure in case of particular difficulties in order to limit dropping-out

MISSION AND ACTIVITIES OF DIRECTORS OF DOCTORAL STUDIES (DED)

Ensure the link between the Doctoral School board and the research domains (laboratories).
To ensure the link with PhD students and close monitoring within the research labs.

Welcome/information of the PhD student on arrival in the laboratory

Annual interview with each PhD student, before each re-enrolment:

- construction/evaluation of his/her training plan
- allocation of training credits
- progress of the thesis/ possible difficulties
- valorisation of the thesis (publication(s), oral communication,...)
- endorsement of the composition and report of the Individual Monitoring Committee

If 4th registration is necessary and defense beyond the 1st quarter of the year:

- participation in the meeting of the Individual Monitoring Committee

MISSION AND ACTIVITIES OF DIRECTORS OF DOCTORAL STUDIES (DED)

In case of problems during the thesis period :

- participation in a mediation meeting

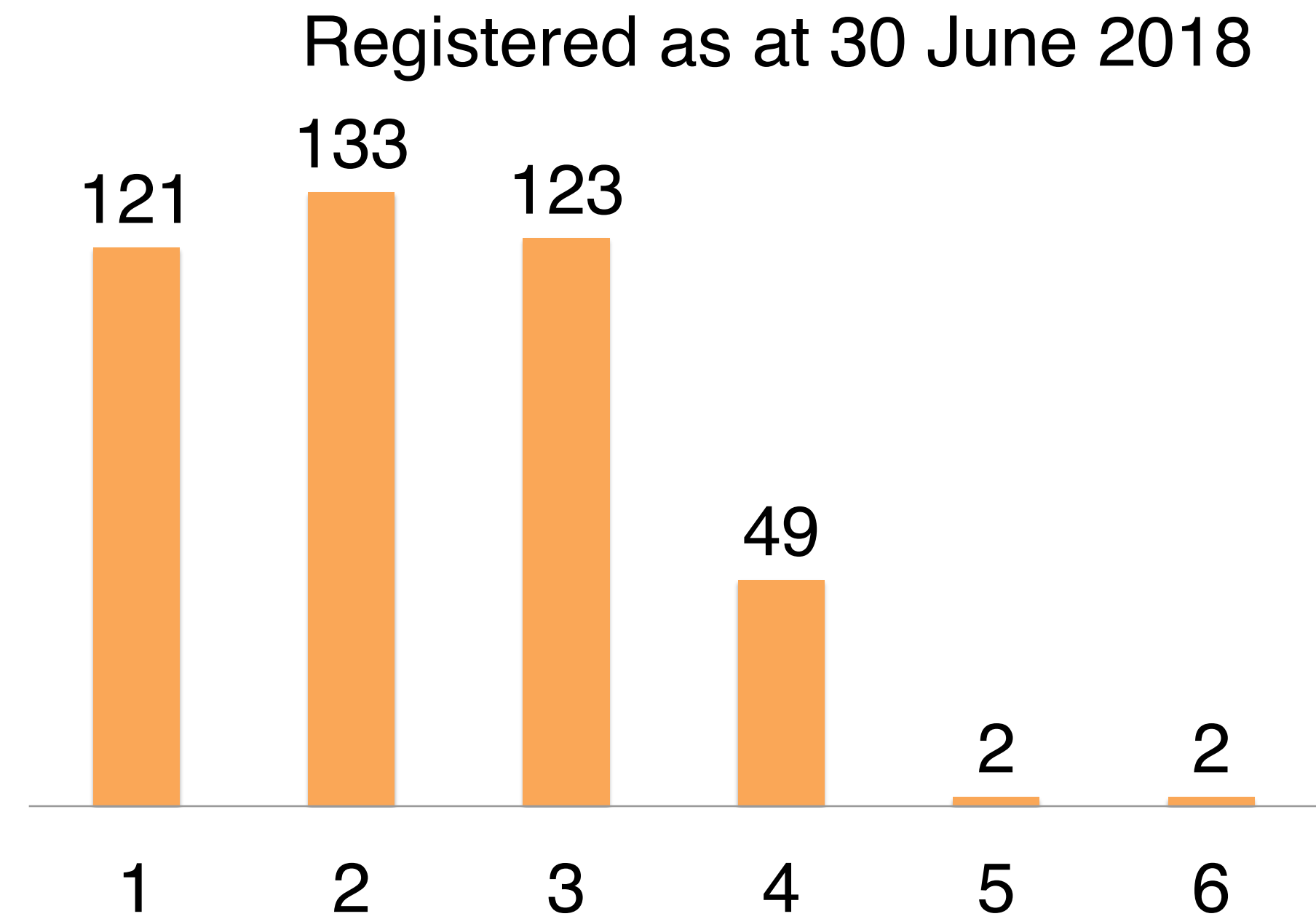
At the beginning of the PhD defence procedure :

- assessment of the Doctoral School trainings/credits
- assessment of valorisation (publications, conferences, others)
- control of the composition of the jury

WHO IS YOUR DIRECTOR OF DOCTORAL STUDIES (DED)?

Laboratory / name of DED	Phalip	Vekemans	Tribovillard	Parol	Focsa	Cornard	Paul	Daviero	Cordier
Unité de Catalyse et Chimie du Solide (UCCS)									
Unité de Matériaux et Transformations (UMET)									
Miniaturisation pour la Synthèse, l'Analyse et la Protéomique (MSAP)									
CERI MP									
de Spectroscopie pour les Interactions, la Réactivité et l'Environnement (LASIRE)									
Physique des Lasers, Atomes et Molécules (PhLAM)									
Laboratoire d'Optique Atmosphérique (LOA)									
Physico-Chimie de la Combustion et de l'Atmosphère (PC2A)									
CERI EE									
Laboratoire Océanologie et Géosciences (LOG)									
Evolution, Ecologie, Paléontologie (EEP)									
Laboratoire Génie Civil & Géo-Environnement (LGCgE)									
BioEcoAgro									

DURATION OF THESIS



Enrolment in 4th year subject to a financing plan until the manuscript is submitted, and to authorisation from the institution of enrolment.

Less than 8% drop-out per incoming cohort.

THE INDIVIDUAL TRAINING PLAN

Principle: obtain a minimum of 60 credits spread over the 3 years of the thesis with a minimum of 10 credits per domain of study.

Cotutelle (foreign co-supervision) : 30 credits instead of 60

3 domains of study

- Scientific (DS courses, Master courses, summer school, ...)
- Cross-cutting knowledge (languages, FLE, Latex, science outreach, scientific ethics, ...)
- Professionalization by Doctoral College (professional training, Doctoriales, etc...)

On average 5 credits / day or 5 credits / 10 hours of classes

PhD students elected to the Doctoral School Council : 1 credit/ Council meeting

Possibility to "colour" your profile

PhD students who want to teach: specific training proposed by the College Doctoral

Training courses are managed via the **ADUM** application

=> see here-after the presentation by C. Van Brussel and B. Figula

TRAINING PLAN AND CREDITS

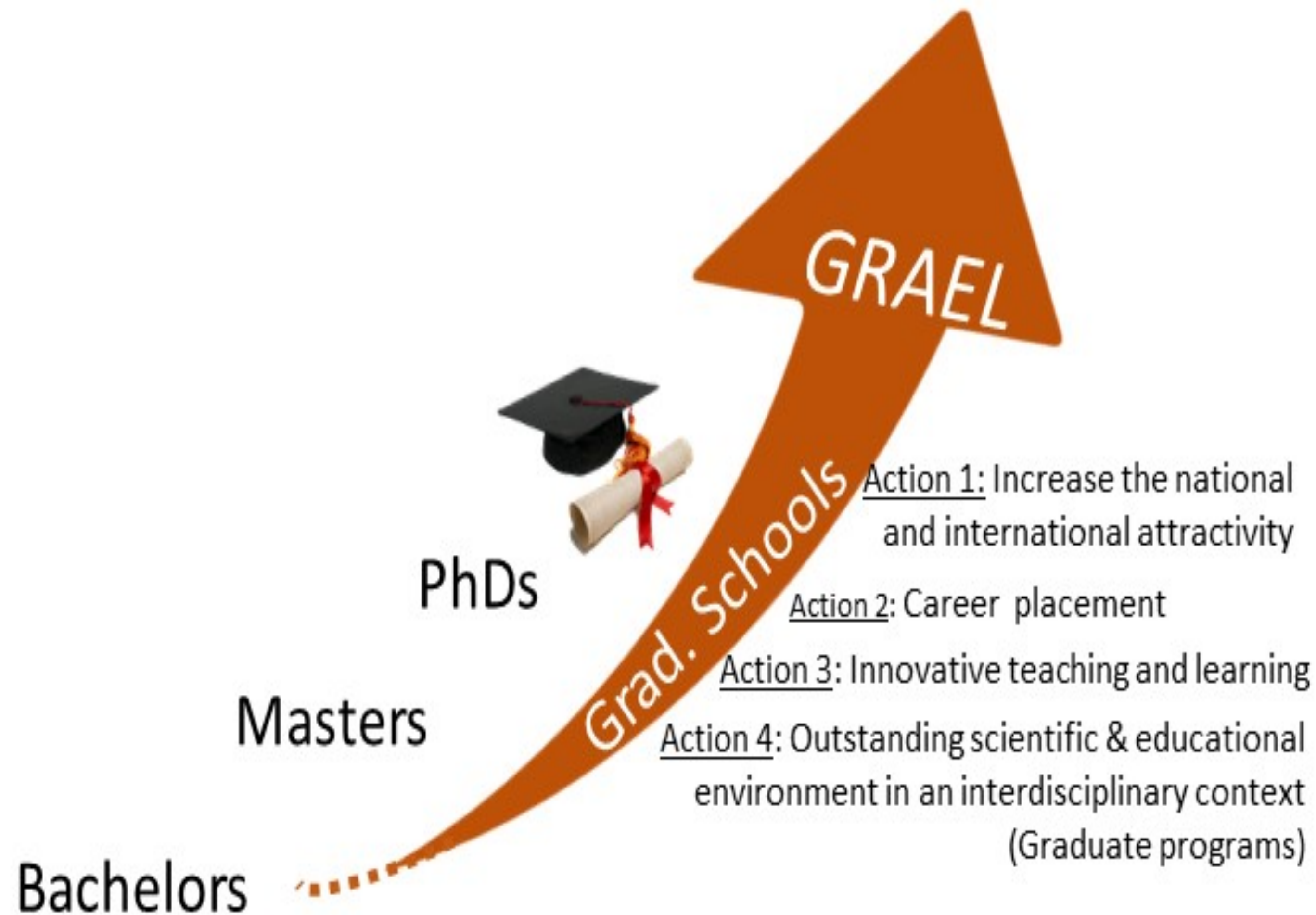
Minimum	60	credits
Including (at the minimum) :		
Cross-cutting knowledge	10	
Scientific and technical courses	10	
Professionnalization	10	
Foreign co-supervised thesis :	30	credits

	Duration	credits
Scientific courses		
Lecture or tutorial	20h	10
Summer school	a few days	5/day
Technical training	a few days	5/day

TRAINING PLAN AND CREDITS (continued)

Some examples	Duration	Credits
Professional training courses		
list of courses on ADUM		
« Doctoriales »	4-5 days	25
Cross-cutting knowledge		
Language (english, other)	30h	15
FLE (French language for foreigners)	36h	20
Fête de la science		5
MOOCS (Open Online Courses)		
Intégrité scientifique dans les métiers de la recherche (U Bordeaux)	16h	10
Éthique de la recherche (U Lyon)	15h	10
Recherche reproductible : principes méthodologiques pour une science transparente (INRIA)		10
Protection de la vie privée dans le monde numérique (INRIA)		10
PhD student elected to the Doctoral School Council	2 or 3 meeting/ year	1/per meeting

THE GRAEL PROJECT AND THE GRADUATE PROGRAMMES



A new project selected and funded in 2020

GRAEL : Graduate Research And Education in Lille (GRAEL)

One objective :

to strengthen the link between Master and Doctorate

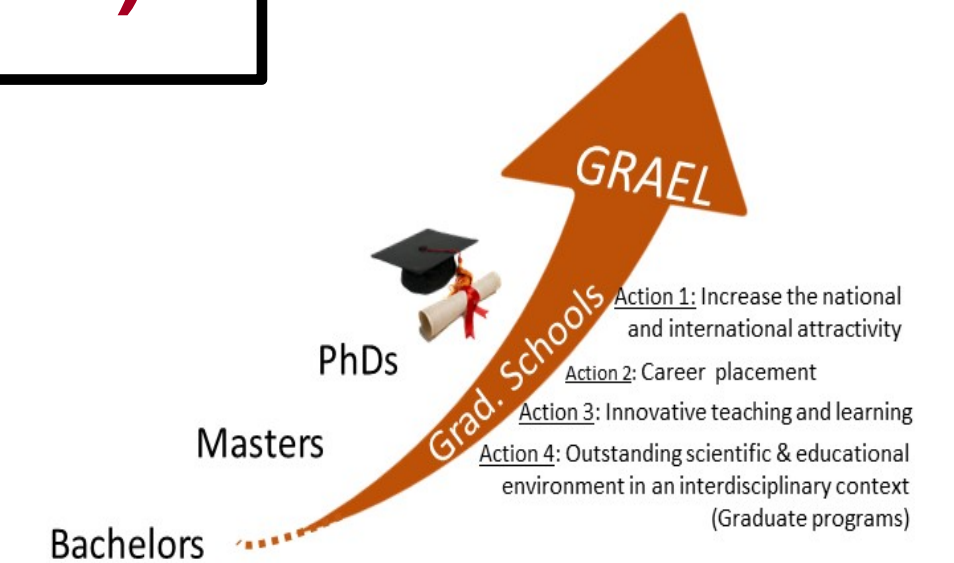
For additional information see the presentation that follows by Pr. C. Toubin and S. Duquesne

THE GRAEL PROJECT AND THE GRADUATE PROGRAMMES (CONTINUED)

In 2021 :

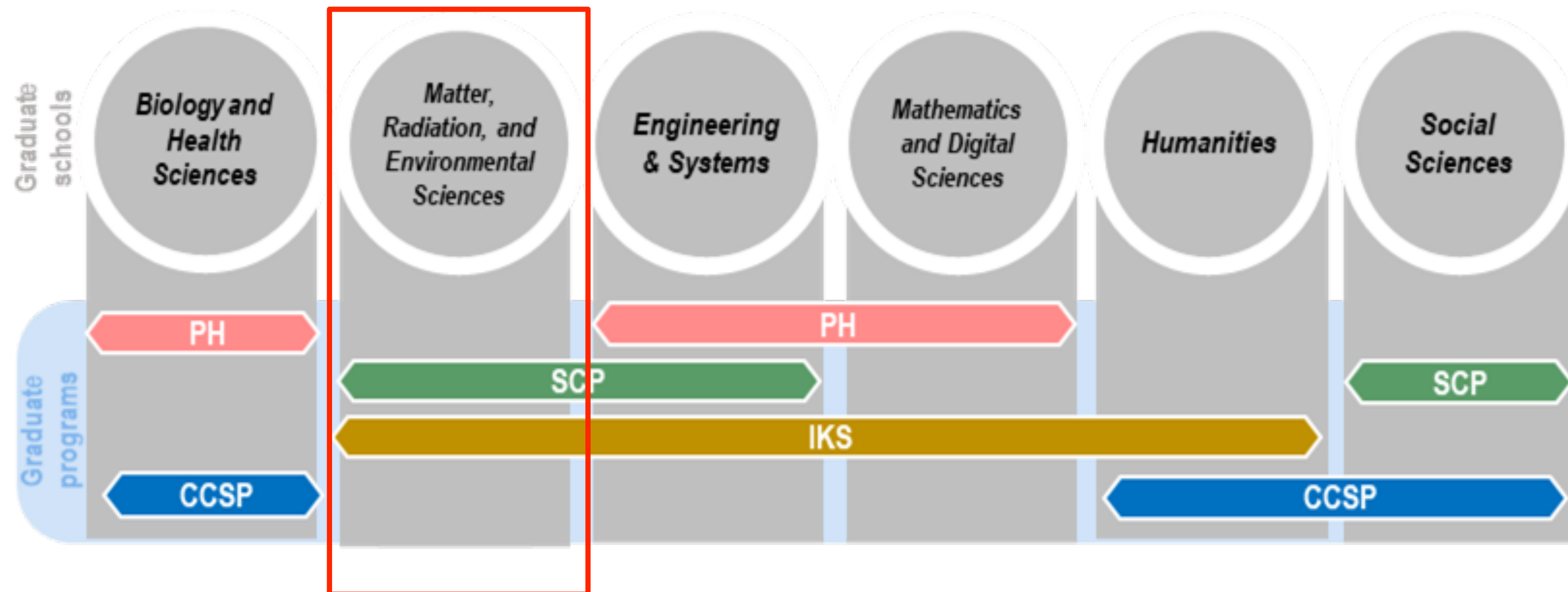
7 Doctoral School

4 Graduate Programmes



GRAEL's six graduate schools and their four interdisciplinary graduate programmes:

- PH: Precision Health,
- SCP: Science for a Changing Planet,
- IKS: Information & Knowledge Society
- CCSP: Changing Cultures, Societies and Practices.



The research activities of the SMRE laboratories are mainly related to the SCP GP and a little to the IKS GP

<http://www.isite-ulne.fr/index.php/en/graduate-programme-science-for-a-changing-planet/>

<http://www.isite-ulne.fr/index.php/en/graduate-programme-information-knowledge-society/>

THE GRAEL PROJECT AND THE GRADUATE PROGRAMMES (CONTINUED)

Science for a Changing Planet Graduate Programme



Coordinators :
Pr. Sophie Duquesne
Pr. Céline Toubin

Information and knowledge Society Graduate Programme



Coordinator :
Pr. Marc Lefranc

Thematic and enhanced (Master + PhD) training :

- a dedicated training plan
- a summer school conference
- etc...

In 2021 some of the PhD thesis projects are included in the Graduate Programmes

For additional information see the presentation that follows by Pr. C. Toubin and S. Duquesne

DOCTORAL LIFE AND INTERNATIONAL OUTLOOK

➤ **Scientific exchanges between PhD students :**

PhD students' days => Scientific fields, institutes and laboratories

➤ **Multidisciplinary scientific culture:**

Conferences of the Doctoral School and/or of research structures (institutes, labex projects, CPER, etc...)

➤ **European and international opening :**

Doctoral School supports mobility during the thesis (1 support / PhD student)

Co-funding by the DS up to a about 500€ => conference and symposium, short stays

20% of the DS total financial resources

PREPARING THE PROFESSIONAL INTEGRATION OF DOCTORS

Support system for professional integration: professionalization actions pooled within the framework of the Doctoral College (DCE):

- Doctoriales®: **on average 30% of doctoral students are from SMRE Doctoral School**

To make the doctor known and valued outside the academic world:

- Partnership with companies and their representative organizations
- Several communication actions of the Doctoral College (PhD Job Day, Challenge Doc, ...)

Development of doctors' career monitoring:

- pooled at the Doctoral College level
- Using ADUM software (coming soon)

PROFESSIONAL INTEGRATION AT 3 YEARS (N+3) OR 1 YEAR (N+1) OF DOCTORS 2016 (IN %)

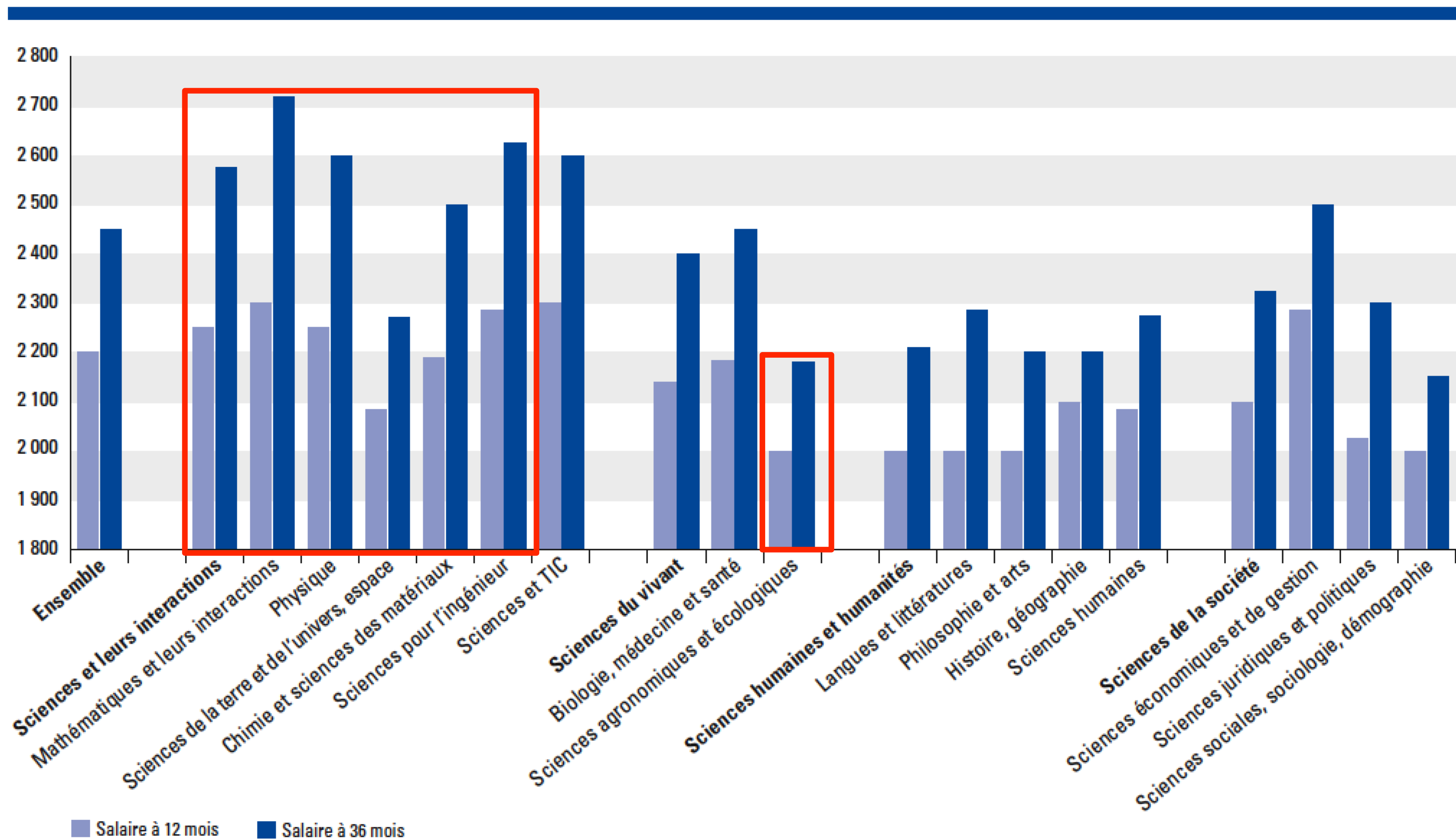
Discipline	Taux d'insertion n+3	Taux d'insertion n+1	Taux d'insertion Master n+30 mois	Emplois stables n+3	Emplois stables n+1	Emplois cadres n+3	Emplois cadres n+1	Emploi à temps plein n+3	Emploi à temps plein n+1	Secteur académique n+3	Secteur académique n+1
Ensemble	92,8	87,5	92	66,5	52,4	95,8	95,2	94,5	93,2	47,0	49,5
Sciences et leurs interactions	94,2	88,8	nd	69,7	52,4	97,9	98,1	97,4	97,2	41,1	46,6
Mathématiques et leurs interactions	95,9	93,7	97	68,7	49,3	98,5	98,5	97,5	97,1	51,2	53,6
Physique	93,3	88,1	89	61,9	46,3	98,2	97,9	96,4	97,3	45,5	49,2
Sc. de la terre et de l'univers, espace	91,0	81,5	87	43,8	33,4	95,7	97,3	97,1	97,8	65,0	64,6
Chimie et sc. des matériaux	91,1	83,6	91	67,7	47,1	96,6	97,9	98,5	97,7	36,4	45,6
Sc. pour l'ingénieur	95,0	91,0	95	77,0	59,9	98,6	98,6	95,9	95,8	32,5	38,3
Sc. et TIC	96,6	91,6	95	77,9	59,2	98,5	98,0	98,7	98,3	38,4	45,7
Sciences du vivant	92,5	85,6	nd	53,2	41,8	95,5	95,7	95,9	95,8	59,0	63,2
Biologie, médecine et santé	92,7	86,5	90	53,4	42,1	95,6	95,7	95,8	95,5	59,1	63,0
Sc. agronomiques et écologiques	91,4	80,9	nd	52,5	40,2	95,2	95,4	96,8	97,1	58,6	64,0
Sciences humaines et humanités	91,7	86,8	nd	70,3	59,5	91,5	89,6	87,7	83,9	46,8	42,8
Langues et littératures	91,4	87,5	87	73,4	60,5	93,6	93,5	89,6	83,6	50,7	46,0
Philosophie et arts	91,1	84,4	80	67,9	57,6	88,8	87,7	81,7	76,7	44,1	42,1
Histoire, géographie	94,3	87,8	83	62,6	52,8	91,2	87,2	90,9	88,6	45,7	43,3
Sc. humaines	90,0	86,7	90	76,2	65,6	91,6	89,4	86,4	84,1	45,8	40,0
Sciences de la société	90,2	86,6	nd	69,9	58,3	94,8	92,7	91,7	88,9	49,7	49,4
Sc. économiques et de gestion	92,8	90,9	94	70,1	61,5	97,1	97,4	92,2	92,4	58,3	56,8
Sc. juridiques et politiques	90,9	84,1	93	79,3	62,3	95,5	90,8	95,0	88,4	39,2	44,1
Sc. sociales, sociologie, démographie	84,4	82,6	84	54,7	46,8	89,2	86,2	85,5	82,9	49,4	42,6

Source : enquête IPDoc 2019 - MESRI-SIES.

PROFESSIONAL INTEGRATION AT 3 YEARS (N+3) OF DOCTORS 2016 (IN %)

Discipline	Docteurs dans le secteur académique	Docteurs dans le public hors secteur académique	Docteurs dans la R&D privée	Docteurs dans le privé hors secteur académique et R&D
Ensemble	47,0	15,2	19,4	18,5
Sciences et leurs interactions	41,1	7,3	32,1	19,5
Mathématiques et leurs interactions	51,2	14,0	20,1	14,7
Physique	45,5	8,3	28,4	17,8
Sciences de la terre et de l'univers, espace	65,0	9,7	10,8	14,5
Chimie et sciences des matériaux	36,4	8,9	32,3	22,5
Sciences pour l'ingénieur	32,5	5,2	39,0	23,4
Sciences et TIC	38,4	4,7	39,0	17,8
Sciences du vivant	59,0	10,1	15,5	15,4
Biologie, médecine et santé	59,1	9,7	15,6	15,6
Sciences agronomiques et écologiques	58,6	12,1	14,7	14,6
Sciences humaines et humanités	46,8	34,8	2,8	15,6
Langues et littératures	50,7	41,8	0,0	7,5
Philosophie et arts	44,1	33,7	4,4	17,8
Histoire, géographie	45,7	34,6	2,6	17,1
Sciences humaines	45,8	29,6	4,6	20,0
Sciences de la société	49,7	22,2	3,4	24,6
Sciences économiques et de gestion	58,3	17,1	4,7	19,9
Sciences juridiques et politiques	39,2	25,2	1,2	34,4
Sciences sociales, sociologie, démographie	49,4	27,6	4,3	18,7

MEDIAN MONTHLY NET SALARY AT 1 YEAR (N+1) AND 3 YEARS (N+3) OF DOCTORS 2016 (IN €)



For your information
PhD Welcome : Wednesday 8 & Thursday 9 December 2021
2 days to welcome international PhD students

12 students of the SMRE Doctoral School currently enrolled

Thank you for your attention



Un événement organisé par :



En partenariat avec :



Avec le soutien de :

