

Electrical, Optical, Bio - Physics and Engineering Doctoral School

<http://www.universite-paris-saclay.fr/fr/formation/doctorat/ed-eobe>

Welcome and information meeting



For PhD registration

- 1) Welcome and introduction
 - 2) EOBE doctoral school organization
 - 3) Paris-Saclay university
 - 4) The ADUM on-line interface and database
 - 5) PhD project: information & good practices
- Discussion & questions.

Welcome to everyone within the EOBE doctoral school.
This is our first meeting!

Why a PhD?

Motivations may of course vary from one person to another one:

- The highest degree of diploma
- International visibility from anywhere
- More and more R&D companies rely on doctors
- The thesis period is a time when we can focus on a project of three years.
- Enthusiasm and dynamism are welcome (and often necessary!).

The EOBE doctoral school relies on a set of high-level laboratories and research teams:

GeePs - Génie électrique et électronique de Paris - <http://geeps.lgep.supelec.fr>

IR4M : Imagerie par Résonance Magnétique Médicale et Multi-Modalités - <http://www.ir4m.u-psud.fr>

IEF - Institut d'Electronique Fondamentale - <http://www.ief.u-psud.fr>

LCF - Laboratoire Charles Fabry - <https://www.lcf.institutoptique.fr>

LPN : Laboratoire de photonique et nanostructures - <http://www.lpn.cnrs.fr>

SATIE - Systèmes et applications des technologies de l'information et de l'énergie - <http://www.satie.ens-cachan.fr>

LPQM - Laboratoire de Photonique Quantique et Moléculaire - <http://www.lpqm.ens-cachan.fr>

SONDRA/SUPELEC : <http://www.supelec.fr/sondra/>

IMNC : <http://www.imnc.in2p3.fr/>

ESTACA/S2ET : <http://www.estaca.fr/recherche/estacalab-innover-transports-demain.html>

CEA/DSM/IRFU/AIM : <http://www.irfu.cea.fr>

CEA/DSV/I2BM/NeuroSpin/UNIRS : <http://www-dsv.cea.fr/instituts/institut-d-imagerie-biomedicale-i2bm/ser...>

CEA/DSV/I2BM/NeuroSpin/UNATI : <http://www-dsv.cea.fr/instituts/institut-d-imagerie-biomedicale-i2bm/ser...>

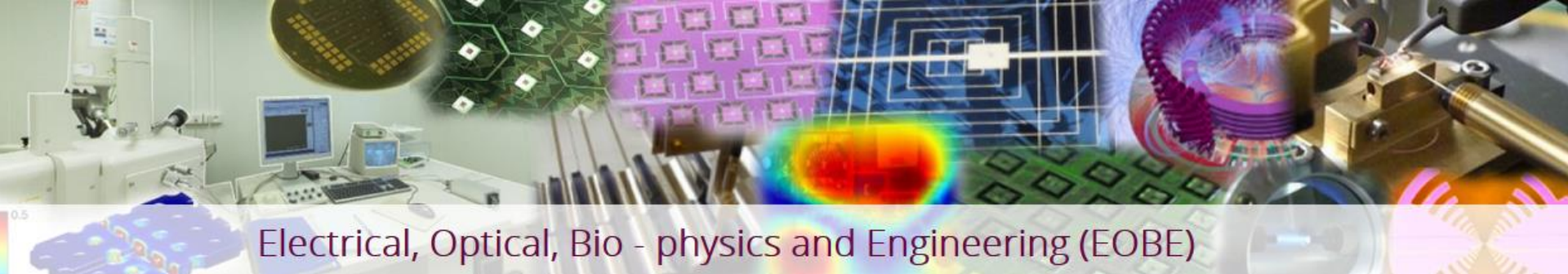
UMR INSERM-CEA/DSV/I2BM/SHFJ/IMIV : <http://www-dsv.cea.fr/instituts/institut-d-imagerie-biomedicale-i2bm/ser...>

UMR CEA-Inserm/I2BM : <http://www-dsv.cea.fr/instituts/institut-d-imagerie-biomedicale-i2bm/ser...>

URA CNRS-CEA/LMN : <http://www-dsv.cea.fr/instituts/institut-d-imagerie-biomedicale-i2bm/ser...>

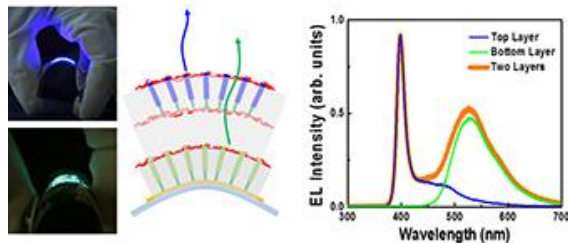
Institut de Myologie/Laboratoire RMN : http://www.institut-myologie.org/ewb_pages/r/recherche_labormn_projets_s...

ONERA - Département Mesures Physiques : <http://www.onera.fr/fr/site-index/departement-mesures-physiques.html>

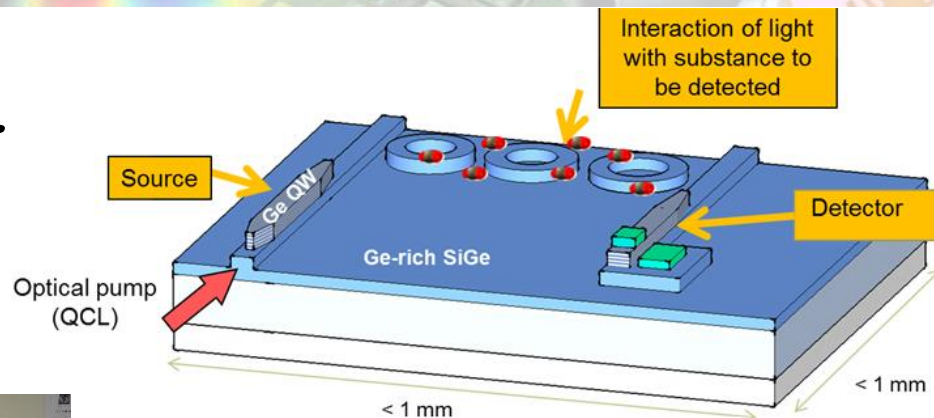


Electrical, Optical, Bio - physics and Engineering (EOBE)

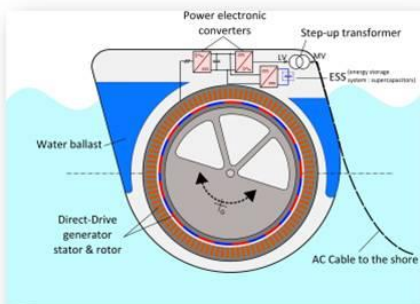
And more and more ...



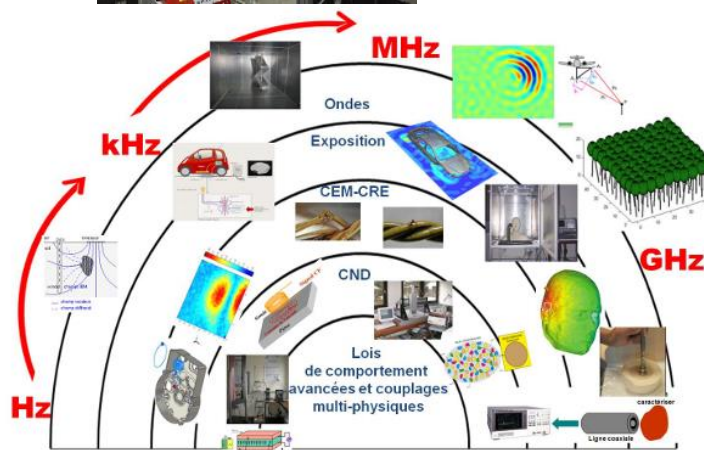
Flexible LEDs based on nanowires
(M. Tchernycheva/IEF)



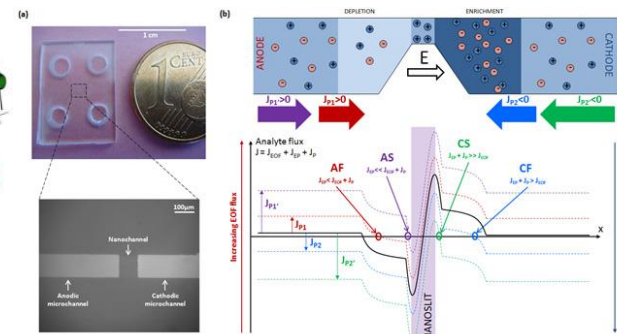
Mid-IR GeSi photonics (D. Morini/IEF)



Systèmes d'Energies pour les Transports et l'Environnement (O. De La Barriere/SATIE)



Electromagnetism (GeePs)



Nanofluidics for biology (A.M. Hahiri/LPN)

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2) Ed EOBE organization



Laurence Stephen, 01 69 15 78 49
assistante de l'ED

	E. CASSAN Directeur		IEF	
Pôle thématique 1 : « Génie électrique et électromagnétisme »	F. MAZALEYRAT Directeur adjoint P. DESSANTE	 	SATIE LGEP	  CentraleSupélec
Pôle thématique 2 : « Electronique, spintronique, et photonique »	E. CASSAN S. BOUCHOULE Directrice adjointe		LPN	
Pôle thématique 3 : « Micro-nano-bio- technologies, microsystèmes, capteurs, instrumentation »	M. CANVA Directeur adjoint		LCF	
Pôle thématique 4 : « Systèmes d'imagerie, imagerie pour le bio-médical »	J.-C. GINEFRI Directeur adjoint		IR4M	

- ❑ The **doctoral school website** is a very important tool for everyone:

<http://www.universite-paris-saclay.fr/fr/formation/doctorat/ed-eobe>

- Many (most of the) questions that arise to you have at least a partial reply on the website:
 - Doctoral courses
 - Registration/New-registration
 - Defense procedures
- In case of any supplementary question, ask directly to your doctoral school board member

<http://www.universite-paris-saclay.fr/fr/formation/doctorat/ed-eobe#contacts-acces>



edeobe_modules.pdf

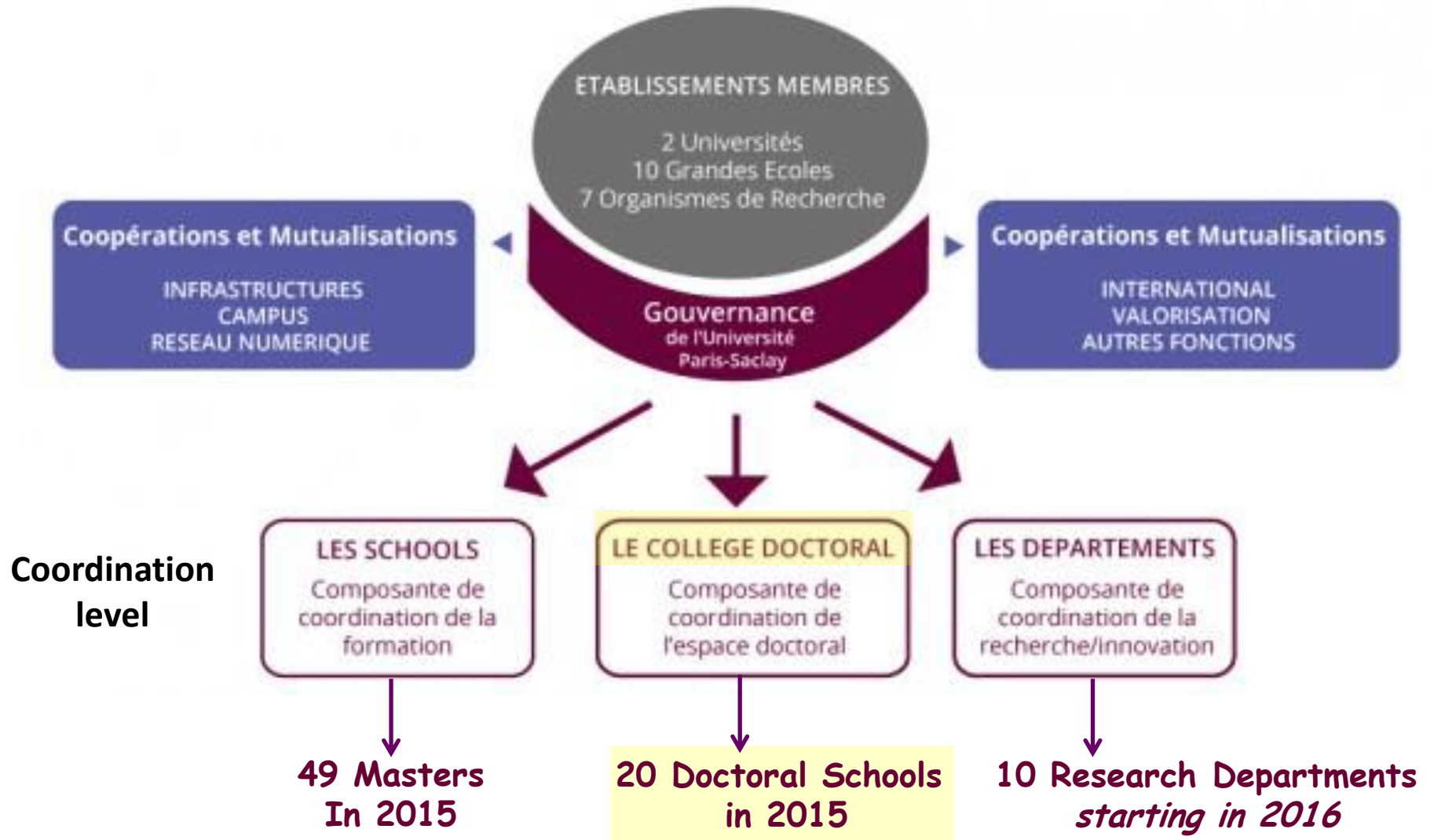


2015-09-28-edeobe_simplifiedp.pdf

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- ❑ **COMUE (=universities and research centres association) created on 2014-12-29 on a multi-disciplinary basis:**
 - 2 universities, 9 « grandes écoles », 7 research institutes.
 - forming the research & education pole of Paris-Saclay cluster
 - with the objective of offering a common graduate program and sharing a common research strategy.
 - with the objective to support and accelerate industrial transfer

- ❑ **Main actions of Paris-Saclay university:**
 - Real estate project
 - Common graduate (/undergraduate) program
 - Common research project
 - Common centre for innovation and industrial valorization of research



□ Paris-Saclay members:

➤ 2 universities :



➤ 9 « grandes écoles » :

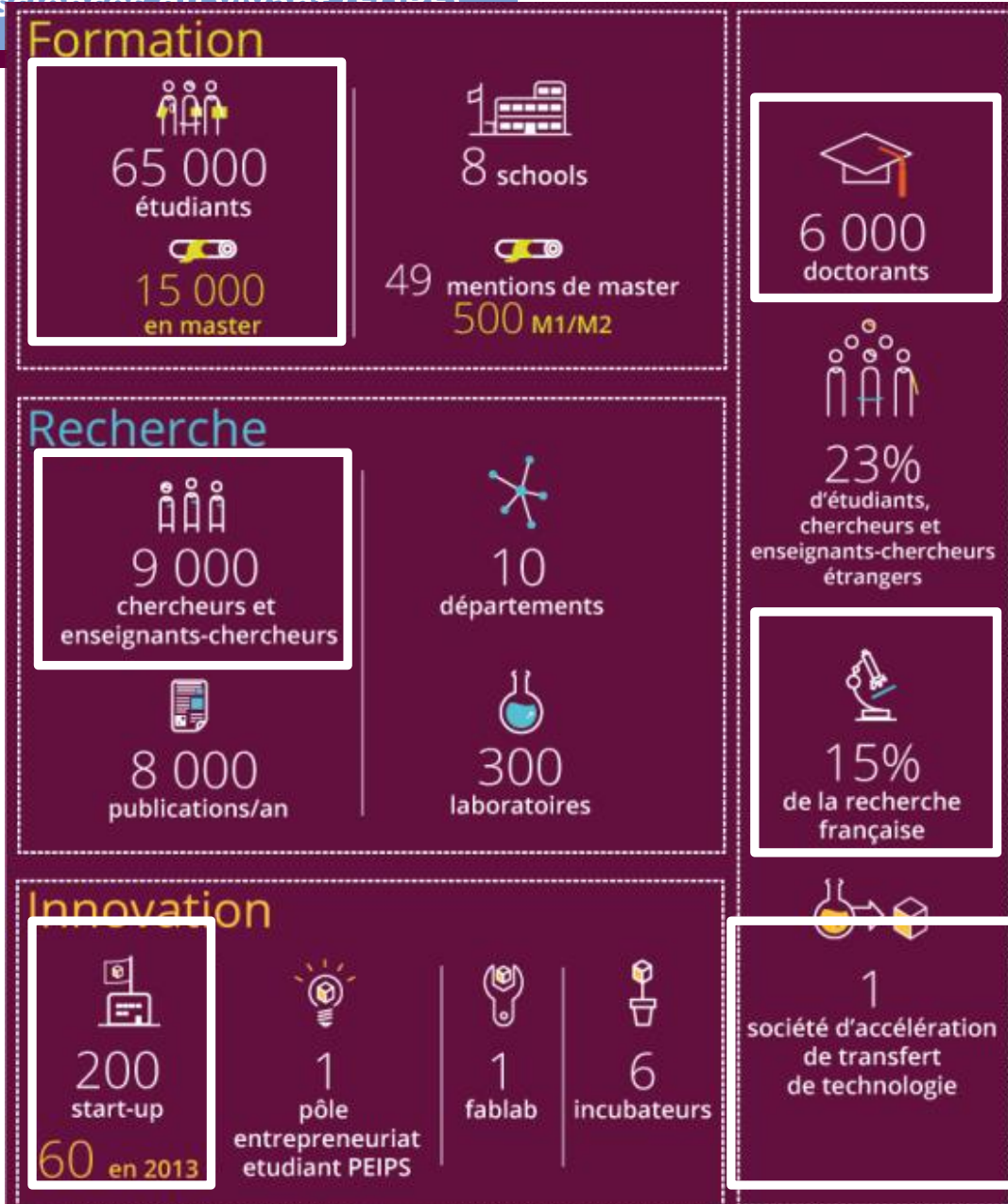


➤ 7 research centers:



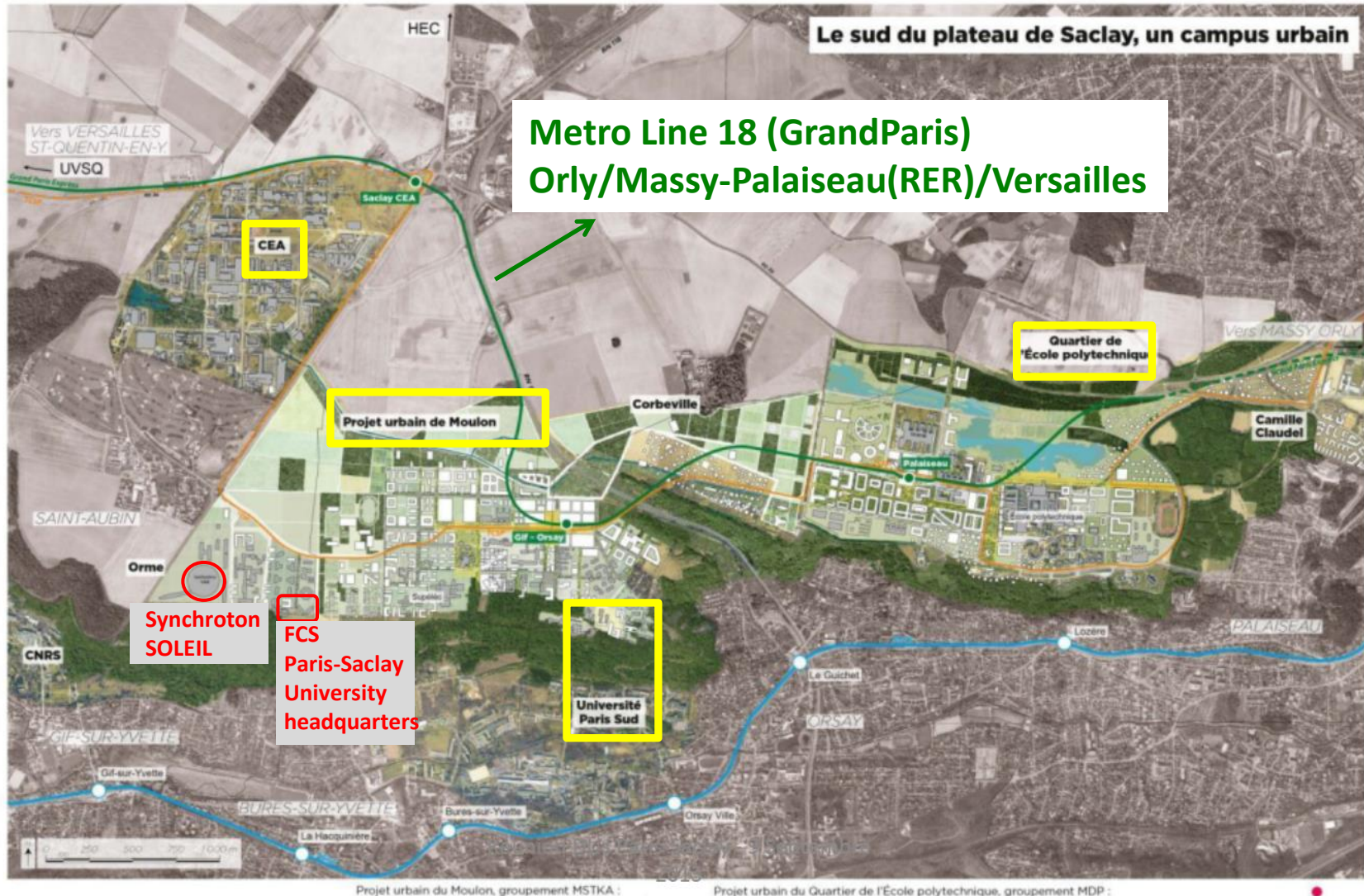
3) Paris-Saclay university

❑ Some data:

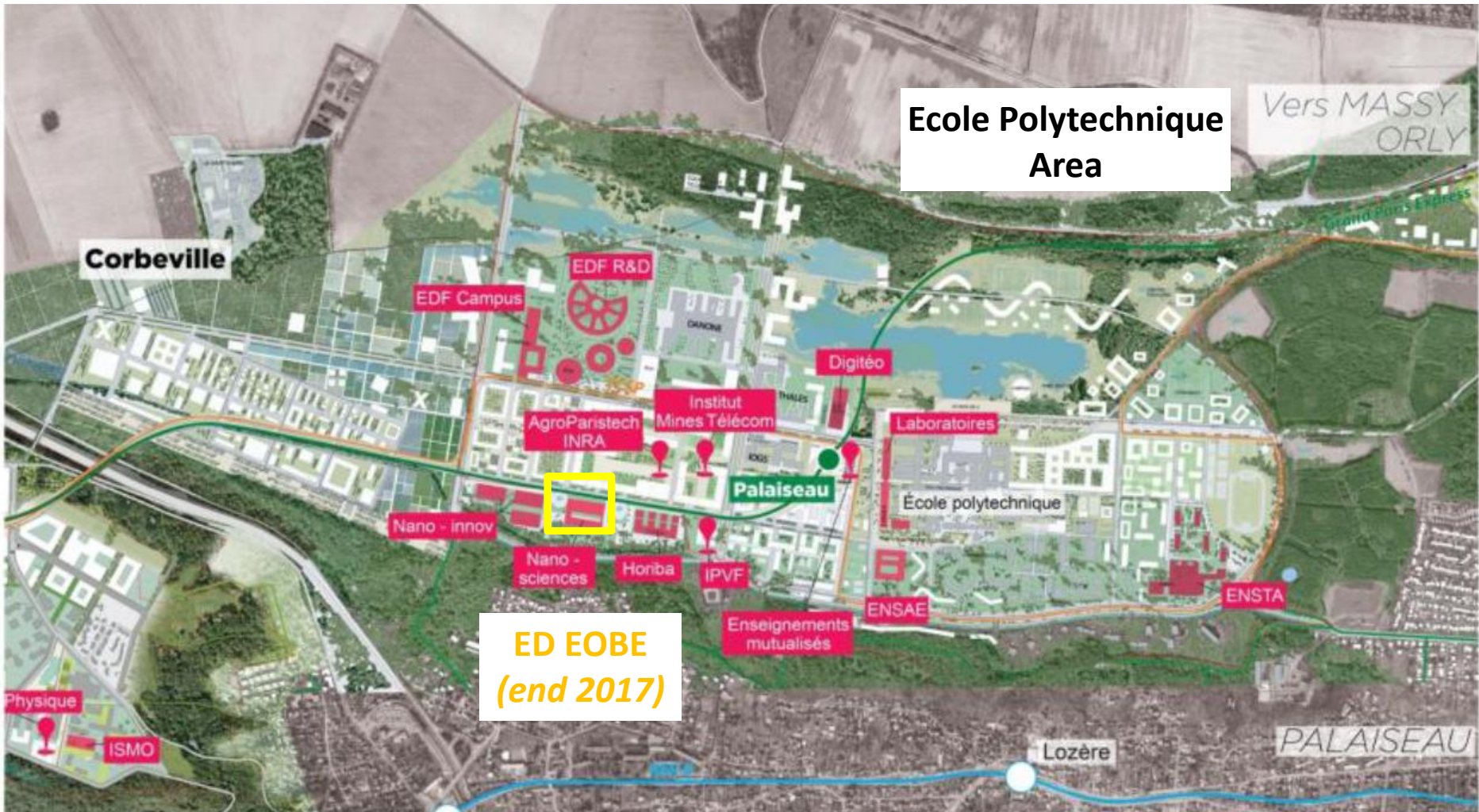


Real estate project:

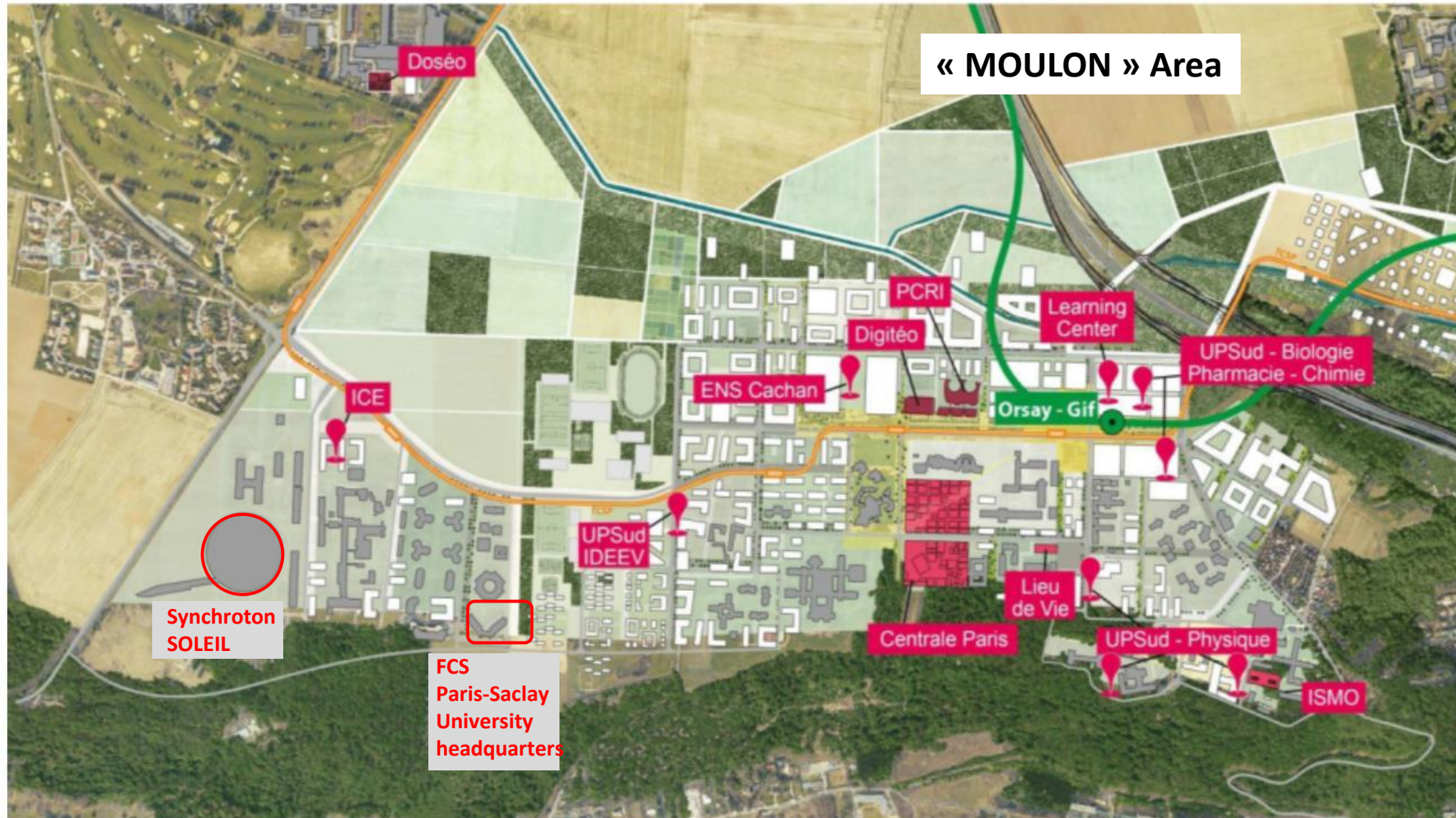
Paris-Saclay South



3) Paris-Saclay university



3) Paris-Saclay university



3) Paris-Saclay university



3) Paris-Saclay university

AIR architectes



Maison de l'étudiant
chantier 2014 -2015

Student house

Jean Guervilly architecte



Institut de
Mathématiques
chantier 2014-2015

Réunion DUS Paris-Saclay - 9 Septembre 2013

Le Campus Vallée⁷ Projets engagés

In the valley...
(under construction)



Conservatoire à Rayonnement
Départemental : concours
d'architectes, 2nd semestre 2013

❑ **+ 5 000 student housing/ accomodations:**

- +10 000 student apartments in total
- + 2500 private housing + housing for visitors.

❑ **Restaurants (« Lieux de vie ») :**

- +23 000 meals served per day → construction of a dozen of restaurants/cafeteria shared between the different research centres ; development of small snacks / cafeteria or « fast foods ».

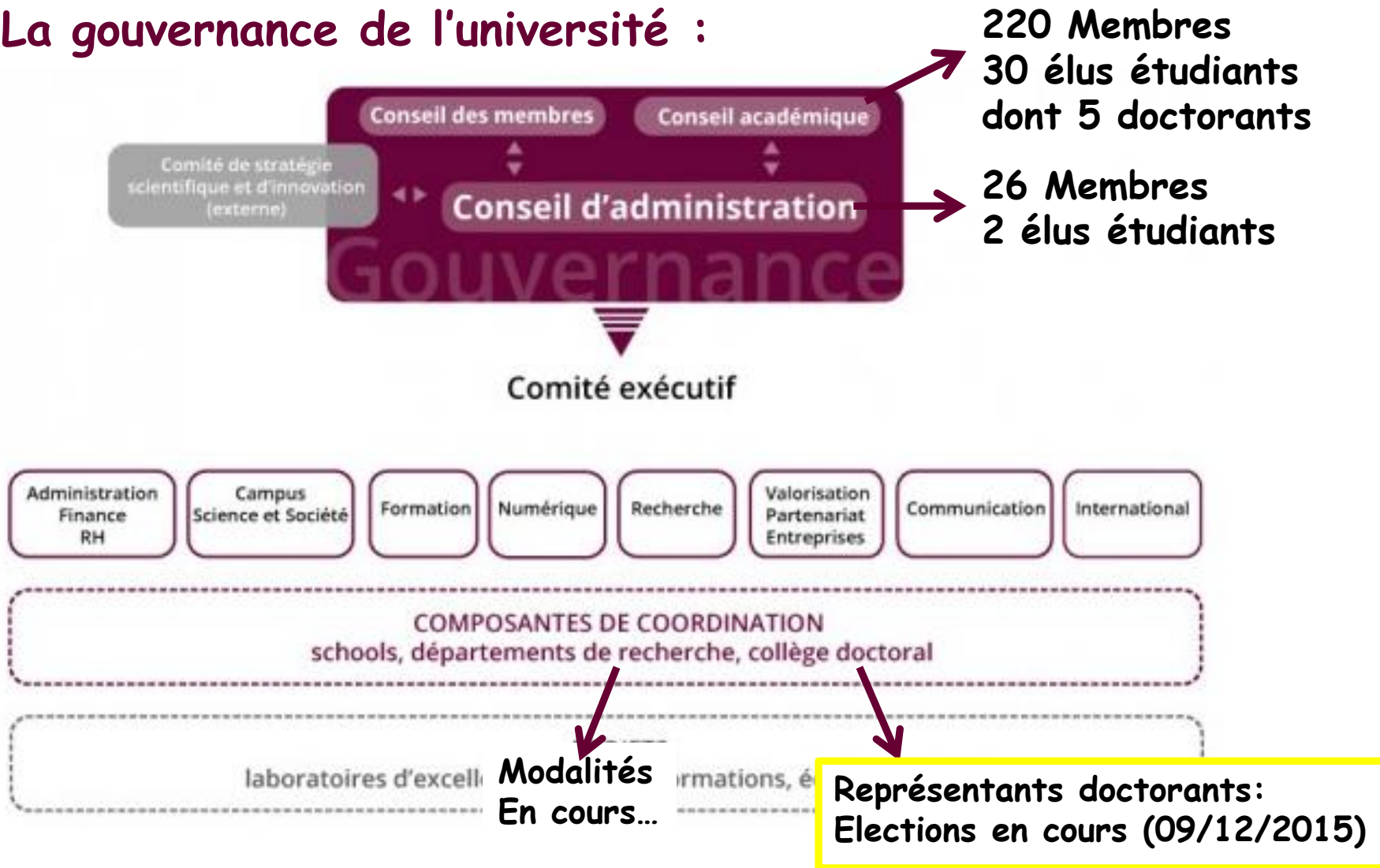
❑ **“Moulon” Area :** (central part)

- ~2600 new apartments (student housing)
- One common restaurant (1000 meals/day).
- A Hall for public events.
- User-friendly areas for social/scientific interactions (« *espaces de convivialité* »)
- cardio-training, 2-3 open sport fields.

❑ **“Learning center” (central digital library)**

- **A single student card** will give access to the different services of Paris-Saclay campus: library (learning center), internet, restaurants....

□ La gouvernance de l'université :



□ La gouvernance :

➤ Conseil académique :

Titulaires	Suppléants
LOUÉRAT Mathilde	BRYCHE Jean-François
DESWARTE Raphaël	ROBERT Valérie
NUNEZ Natalia	MERCIER François
SOHIER Thomas	DUPAS Agathe
DRAJAC Carole	MESLIN Christophe

➤ Collège doctoral : **Elabore la politique doctorale pour l'ensemble des écoles doctorales de Paris-Saclay.**

<https://www.universite-paris-saclay.fr/fr/actualite/elections-au-college-doctoral-representants-des-doctorants>

1. Elections organisées par voie électronique.
2. Le 27/11/2015 chaque doctorant inscrit à la date du 25/11/2015 a reçu par courriel, à l'adresse mail fournie dans ADUM, les informations nécessaires pour voter.
3. 30/11/2015 - 7/12/2015 : Vote par voie électronique.
4. 09/12/2015 : Proclamation des résultats.

□ Cérémonie de remise du diplôme de doctorat de l'Université Paris-Saclay:



Vendredi 1er Juillet 2016 au Palais des Congrès de Versailles.

* Réservez dès à présent votre journée pour cette grande cérémonie en l'honneur des docteurs.

<https://www.universite-paris-saclay.fr/fr/ceremonie-diplome-2015>

❑ Le diplôme de doctorat de l'université paris-Saclay : à partir du 1^{er} Octobre 2015

Espace européen de l'enseignement supérieur - European higher education area - Espace européen de l'enseignement supérieur

R É P U B L I Q U E F R A N Ç A I S E
MINISTÈRE DE L'ÉDUCATION NATIONALE, DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE

université
PARIS-SACLAY
DOCTORAT

Specimen

Vu le code de l'éducation, notamment son article L. 612-7, L. 613-1, D. 613-3 et D. 613-6 ;
Vu le code de la recherche, notamment son article L. 412-1 ;
Vu les textes réglementaires autorisant l'établissement d'enseignement supérieur étranger à délivrer le diplôme (le cas échéant) ;
Vu l'arrêté du 3 septembre 1998 relatif à la charte des thèses ;
Vu l'arrêté du 6 janvier 2005 relatif à la cotutelle de thèse ;
Vu l'arrêté du 7 août 2006 relatif à la formation doctorale ;
Vu l'arrêté du ____ portant accréditation de l'école doctorale ;
Vu les pièces justificatives produites par M. _____, né(e) le ____ à _____, en vue de son inscription au doctorat ;
Vu le procès-verbal du jury attestant que l'intéressé (e) a soutenu, le (date de soutenance), une thèse portant sur le sujet suivant : (titre de la thèse ou synthèse des principaux travaux), préparée au sein de l'école doctorale (nom de l'école doctorale) devant un jury présidé par (nom et titre du président) et composé de (noms et titres des membres du jury) ;
Vu la délibération du jury ;

Le diplôme de DOCTORAT en (discipline) préparé au sein de (nom de l'établissement d'enseignement supérieur) auquel le diplôme a été préparé) est délivré à (Mme ou M.) (prénom, NOM patronyme) au titre de l'année universitaire ____ et confère le grade de docteur, pour en jouir avec les droits et prérogatives qui y sont attachés.

Fait le (date)

Le titulaire

Signature du Président de l'Université Paris-Saclay

Le recteur d'académie, chancelier des universités

Numéro du diplôme

Espace européen de l'enseignement supérieur - European higher education area - Espace européen de l'enseignement supérieur

UNIVERSITÉ PARIS SUD

CentraleSupélec

EVS CACHAN

INSTITUT d'OPTIQUE GRADUATE SCHOOL

TELECOM ParisTech

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Un dossier pour votre suivi pédagogique et pour votre carrière future :

Consolidation des données :

- De l'importance de bien renseigner son dossier
 - Données fiables pour l'ED
 - Dossier complet pour attester de vos expérience, compétences etc.
 - Informations vérifiées par l'ED
- Les points importants
 - Les diplômes (y compris notes, classement...)
 - Le contrat doctoral
 - La mission complémentaire (éventuellement)
 - Taux d'encadrement $\Sigma=100\%$! **à discuter avec le DT**
 - Cotutelle (éventuellement)
 - Employabilité

Utilisable à long terme

Remplir au fur et
à mesure

4) ADUM on-line interface

- Take in charge by yourself to learn all the possibilities offered by your ADUM personal account.
- Things are pretty intuitive and you can switch in english.

The screenshot displays the ADUM on-line interface. At the top, there is a navigation bar with tabs: "Who are you?", "Your diplomas", "Your PhD Thesis", "Personalization", and "Confirmation". A search bar labeled "Rechercher..." is on the right. Below the navigation bar, a status bar shows "Validated" (green check), "Ongoing" (yellow exclamation mark), and "To be done" (red exclamation mark). The main content area is divided into several sections:

- My profile**: Includes links for "Online Display", "I want to change my password", "My CV", and "My photo (jpg)".
- Procedures**: Includes a message: "Your profile has been registered for a 1^{ere} year of PhD studies in 2015-2016".
- Career space**: Includes links for "Consult the Job offers", "Skills Portfolio", "My employability", "My professional situation", and "My scientific productions".
- Trainings**: Includes links for "Training modules Catalogue", "Statement of the undergone training modules", "Training module", and "Add an external training module".
- Administrative documents**: Includes a note: "Documents must be printed in portrait format." and a list of documents: "Inscription", "CNIL Form (Digital registration certificate ADUM to be included in your registration folder)", "Procédures et documents de références", "Charte des theses", "Liste des pieces a fournir", "GESTION SCOLARITÉ - FICHE APOGÉE", "Autorisation d'inscription en doctorat", and "Dossier de scolarité".

Two blue arrows are overlaid on the image:

- One arrow points from the text "Courses" to the "Trainings" section.
- Another arrow points from the text "Publications (mandatory)" to the "Career space" section.

Publications : Saisie dans ADUM

The screenshot displays the ADUM online interface. At the top, there is a navigation bar with tabs: 'Espace personnel', 'Mon profil' (highlighted in pink), and 'Questions'. Below this, a progress bar shows steps: 'Qui êtes-vous ?', 'Vos diplômes', 'Votre thèse', 'Personnalisation', and 'Confirmation'. A search bar with a magnifying glass icon and the text 'Rechercher...' is located on the right. A Facebook icon is also visible. On the left side, there is a sidebar with a profile picture and a list of menu items: 'Coordonnées', 'Gestion affichage', 'Employabilité', 'Situation professionnelle', and 'Publications' (highlighted with a blue arrow). The main content area is titled 'Publications' and lists three entries:

- 2015 - Comparison of three measuring systems at high frequency for non oriented silicon steels: influence of the rolling direction on magnetic losses and B(H) curve
- 2015 - Skin effect in steel sheets under rotating induction
- 2014 - Comparaison des systèmes de mesure et influence de la direction de laminage sur les pertes magnétiques et sur la courbe anhystérétique

Below the list, there is a button labeled 'AJOUTER UNE PUBLICATION'.

4) ADUM on-line interface

Ajouter une publication

Type de la publication *

Article de revue ou conférence internationale avec actes

Titre de la publication *

Libellé de la revue *

Etat de la publication (Veuillez sélectionner une valeur) *

Volumes et pages *

Année de publication *

Auteurs

Brevet (Veuillez sélectionner une valeur)

URL de la publication

URL éditeur et/ou déposez vos articles dans la base en libre accès <https://hal.archives-ouvertes.fr/>

4) ADUM on-line interface

The screenshot displays the ADUM on-line interface. At the top, there's a navigation bar with 'Espace personnel', 'Mon profil', and 'Questions'. Below this, a progress bar shows steps: 'Qui êtes-vous?', 'Vos diplômes', 'Votre thèse', 'Personnalisation', and 'Confirmation'. The main content area is divided into several sections:

- Mon profil**: Includes links for 'Affichage sur le web', 'Changer mon mot de passe', 'Mon CV', and 'Ma photo (jpg)'.
- Procédures**: Contains information about the 4^{ème} year registration for 2015-2016 and a link to 'Je soutiens ma these dans les 3 mois'.
- Espace carrière**: Lists links for 'Consulter les offres d'emploi', 'Mon portefeuille de compétences', 'Mon employabilité', 'Ma situation professionnelle', and 'Mes productions scientifiques'.
- Formations**: Includes 'Catalogue', 'Récapitulatif de participation aux formations', 'Formations en cours', and 'Ajouter une formation "hors catalogue"'. A red box highlights this section with the text 'Toutes les formations spécifiques ED de France proposées dans ADUM'.
- Documents administratifs**: Features a section for 'Inscription' with links for 'Formulaire CNIL (Attestation d'enregistrement ADUM)', 'Procédures et documents de références', 'Charte des theses', 'Liste des pieces a fournir', 'Autorisation d'inscription en doctorat', and 'Dossier de scolarité'. A red box highlights this section with the text 'Cours de M2R et autres formations'.
- Fiches pratiques**: A section at the bottom right with a 'Consulter' button.

A sidebar on the left contains links for 'Etat civil', 'Coordonnées', 'Rattachement administratif', 'Financement', 'Déroulement Thèse', 'Langues vivantes', 'Documents à joindre', 'Gestion affichage', 'Employabilité', 'Situation professionnelle', and 'Publications'.

Toutes les formations
spécifiques ED de France
proposées dans ADUM

Cours de M2R et
autres formations

ADUM will follow your process; eg: Towards the PhD defense

The screenshot displays the ADUM online interface. On the left, a sidebar contains navigation links: 'Contact information', 'STAR Deposit' (highlighted with a blue circle), 'Display management', 'Employability', 'Professional situation', and 'Publications'. The main content area is divided into two columns. The left column, titled 'Procedures', contains a message about profile registration for a defense on 15 janvier 2016 and a button 'I CANCEL FINALIZATION & I MODIFY MY DATA'. The right column, titled 'Administrative documents', includes a red warning 'Documents must be printed in portrait format.' and a list of links under the heading 'Inscription': 'Procédures et documents de références', 'Charte des theses', 'Liste des pieces a fournir', and 'GESTION SCOLARITÉ - FICHE APOGÉE'. Below these, a section titled 'Deposit Space for the digital file of the thesis manuscript, identical to the version transmitted to the jury members.' contains detailed instructions about downloading documents, depositing the PDF version, and checking the file's validity with the CINES tool. It also includes a 'Thesis Archiving version' section with a 'Save my file' button and a question about whether the archiving version is the same as the dissemination version. At the bottom, there is a 'Dissemination area of your thesis:' section with two questions about dissemination via the Internet network and reproduction rights. The footer states: 'By saving the page, YOU DECLARE YOU HAVE UPLOADED your PhD Thesis digital version, identical to the version transmitted to the jury members, and YOU HAVE CHECKED the PDF validity with the CINES "FACILE" tool.'

Procedures

› Your profile has been registered for a defense on 15 janvier 2016.
the actualization of your profile on 12 novembre 2015 is awaiting validation by the administrative service.

[I CANCEL FINALIZATION & I MODIFY MY DATA](#)

Administrative documents

Documents must be printed in portrait format.

Inscription

- › Procédures et documents de références
- › Charte des theses
- › Liste des pieces a fournir
- › GESTION SCOLARITÉ - FICHE APOGÉE

Deposit Space for the digital file of the thesis manuscript, identical to the version transmitted to the jury members.

① To download the required documents to get the authorization to defend your thesis, you must (*caution! check the deposit deadline with your establishment*) upload the PDF version of your thesis, identical to the version transmitted to the jury members, and define the dissemination rights accorded to the establishment. It is compulsory to deposit this file before the defense, according to the [Order of 7 August 2006](#). This will also allow the BU (University Library) to check the format of the file. You have to check the validity of your PDF file with the tool [FACILE](#) of the CINES. If your file is declared invalid, please do not hesitate to contact the CINES Support service, by clicking on the link on the top of the page: "*demandeur une analyse de second niveau*".

No later than 3 months after the defense, you will have to upload in your Private space the definitive file of your thesis, which must comply with the corrections requested by the jury.

Thesis Archiving version --> [Save my file](#)

Is the archiving version the same that the dissemination version? ☐ non ☒ oui

Dissemination area of your thesis:

- Do you want your thesis to be disseminated by your establishment via the Internet network? ☒ yes ☐ no

- Do you assign the ESTABLISHMENT the Reproduction rights, including the Printing and the Copying rights on any medium? ☒ yes ☐ no

By saving the page, **YOU DECLARE YOU HAVE UPLOADED** your PhD Thesis digital version, identical to the version transmitted to the jury members, and **YOU HAVE CHECKED** the PDF validity with the CINES "FACILE" tool.

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PhD project: Multiple actors

Actor	Role
PhD student	Choose the PhD subject, conducts research works, publishes his/her work, inform his/her supervisor of the progress of work
PhD supervisor	Define the PhD subject ("sujet de thèse") Supervise the PhD student
Head of research team / laboratory	Validates the PhD subject Ensures funding and hospitality
Head of the doctoral school	Ensures that scientific, material and financial conditions are in accordance with the progress of the research work and the preparation of the thesis
Head of institution	Legal responsible person

The PhD chart

Role of the PhD supervisor

- Ensures remuneration of his PhD students during the whole duration of the PhD
- Elaborate the PhD project in cooperation with the PhD student
- Ensures a frequent and regular follow-up of the thesis advancement
- Provides the needed resources for the accomplishment of the PhD project
- Encourages the PhD student to attend useful modules for his PhD project
- Commits to help the PhD student preparing the rest of his career
- Incites and helps the PhD student to publish his work
- Advices the PhD student for the writing of the manuscript and the preparation of the defense
- Proposes the two reviewers for the manuscript and the jury's members for the defense

Rights and obligations of the PhD student

Interlocutor	Rights	Obligations
Supervisor	Timetable established together: meetings, milestones, intermediate reports, etc	Regularly informed of the progress of the work, including difficulties
Laboratory	Working conditions identical to the other members of the institution	Safety regulations, attendance, professional and intellectual property rules of the institution. Tasks of general interest.
Institution	Voting for the representatives in the institution	Access to common rooms and services
Doctoral school	Appointment when required	Informed about his/her position during 5 years after the defense

Progress of the PhD

□ 3 years is short!!

The thesis is a living personal project to be carried out dynamically and enthusiastically.

Year	Step	Tasks
1st	Entering the subject	Bibliography <i>Scientific Modules</i>
2nd	Production	Experimentation First publications <i>Professionnal Modules</i>
3rd	Production and defense	Submit a journal paper Writing Defense

PhD duration

- The duration is 36 months
- The PhD student is committed to end his/her thesis in 36 months
- The 4th year registration is allowed only on exemption
- If the duration is longer than 36 months, funding has to be insured
- Present EOBE mean duration: 41.5 months (too long!)

The PhD supervisor and yourself have
to anticipate this deadline (at least one year before).

Publications

- **Valuation of works:**
Seminars, congresses, publications
- **How many?:**
By default, one journal paper and one intern. conf. com.
are required by the EOBE doctoral school
- **Advice :**
Participation to at least one international conference
- **Remark:**
Diffusion of the results of course needs the explicit
agreement of the PhD supervisor

The defense (1/2)

- **Conditions :**

- Writing the PhD thesis
- Agreement of the supervisor
- Sufficient scientific production
- Validation of all scientific and professional modules

- **4 steps**

1. Designation of two external reviewers
2. Designation of the jury
3. Authorization of the defense according to the reviewers' reports
4. Legal deposit of the thesis: ADUM + Appointment with the library

The defense (2/2)

- **Writing the PhD thesis**
 - Full report different from the papers
 - Not gathering the papers

Sometimes a very difficult step!:

- Test before your ability to organize ideas and write.
- Allocate enough time for writing the manuscript in agreement with your PhD supervisor.



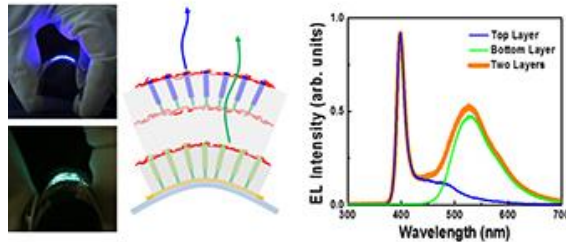
- **Language:** in French, because of the French law (art. L121-3)
 - Possible exemptions upon written request; e.g.: non French speaking students ; an extended summary is then required (# 10pages)
- **Defense:** in French
 - Exemptions: if all jury members agree with a defense in English

In case of conflict

- Most important : **Communicate**
 - With your supervisor
 - With the head of the research team
 - With the doctoral school
- To solve a conflict : **The sooner the better**

Discussing with the doctoral school staff is always possible for the PhD students, at any needed time.

And more and more ...



Flexible LEDs based on nanowires (M. Tchernycheva/IEF)



es (D. Morini/IEF)

more and more ...

EL Intensity (arb. units)

Wavelength (nm)

Top Layer
Bottom Layer
Two Layers

Source

Opt

Room & Questions

based on nanowires
ernycheva/IEF)

es (D. Mo

non

CEM-CRE

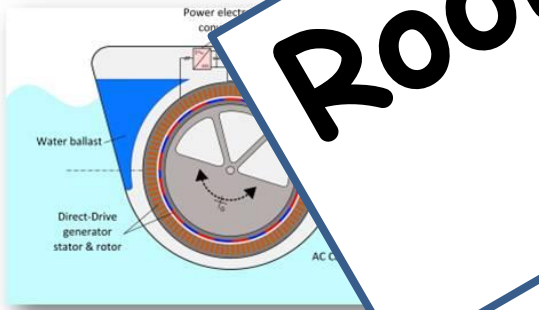
(a)

(b)

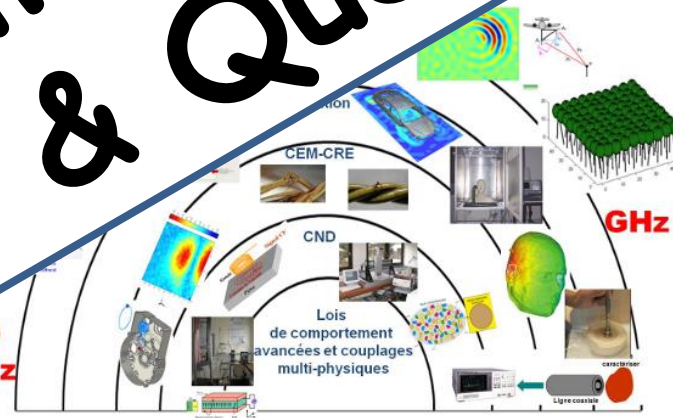
1cm

1C

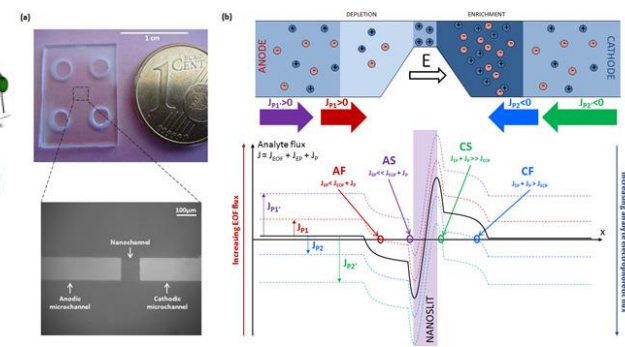
ANODE



Systèmes d'Energies pour les Transports et l'Environnement (O. De La Barriere/SATIE)



Electromagnetism (GeePs)



Nanofluidics for biology (A.M. Hahiri/LPN)