

DE LA RECHERCHE À L'INDUSTRIE



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Education and training

Details in Annexe 7

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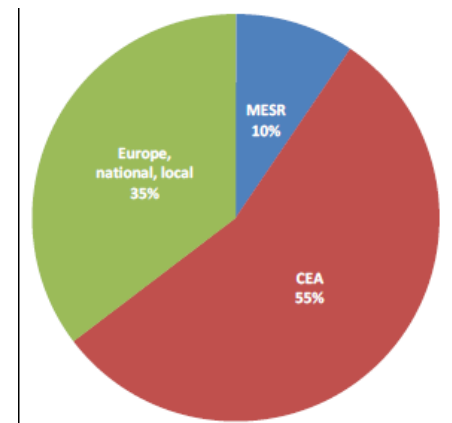
PHD STUDENTS : FRENCH CONTEXT

- **Ecoles Doctorales:**

- PhD students and supervisors are registered to one given Ecole Doctorale
 - Supervisors have to be accredited (HDR diploma), 2 PhD at the same time
- Follow up of the PhD : lectures, interviews, ...
- Provide fundings
- IRFU implication :
 - 2008-2013 → affiliated to 3 Ecoles Doctorales, with strong involvement within their governance
 - Future: Paris-Saclay University context → 1 new Ecole Doctorale co-managed by F. Deliot – IRFU/SPP (SPP, SPhN, SACM, SEDI); 2 Ecoles Doctorales in the regional area (SAP)

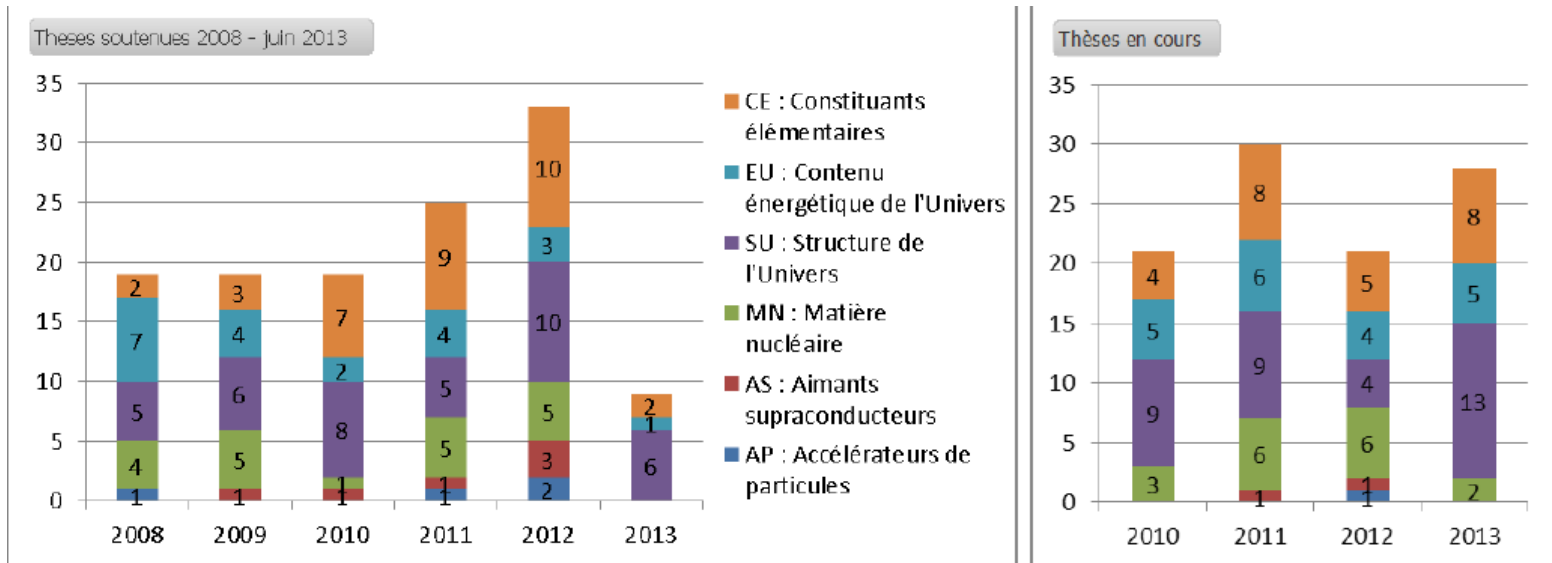
- **Funding sources (average over the last 5 years):**

- Ministry (Ecoles Doctorales): 10%
- Local and national agencies, Europe,...: 35%
- CEA: 55%
 - specific contracts (CFR, 12/y @ IRFU)
 - co-funding: CNES, CNRS, Paris-Saclay,...



PHD STUDENTS AT IRFU

- **122 Theses defended (2008-2013), 99 Theses ongoing**
 - PhD students origin: 35% from regional masters, 25% from abroad
 - PhD selection: all of them have to be validated (Haut Commissaire)



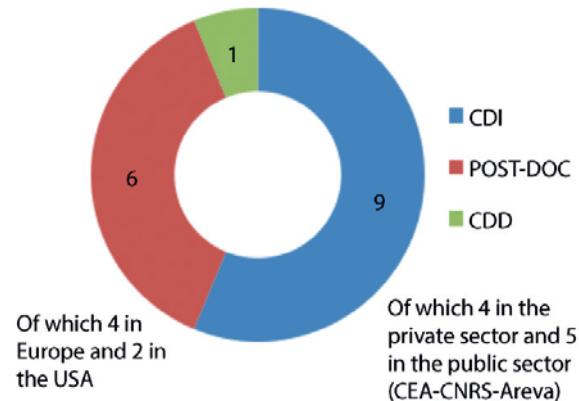
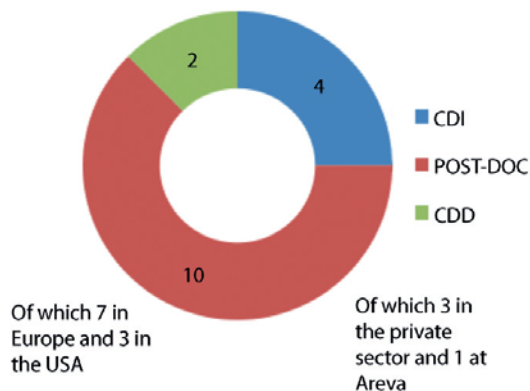
- **140 accreditation to supervise PhD students (HDR)**
- **Future:**
 - Increase the number of PhD students in the instrumental departments
 - Working group devoted to this
 - Increase the total number of PhD (→ funding)

• PhD follow-up:

- Regular interviews with the department PhD contact, formal annual report (INSTN)
- D-days: open presentations for 2nd year PhD students
- Specific courses organized by INSTN
- IRFU encourages and helps PhD students wishing to teach (55%)

• Post-doctoral integration:

- Survey of all PhD holders 2 & 3 years after their PhD defense
- Extension of the length of postdoctoral contracts prior to a permanent position
- Very good insertion into the private sector (wide variety of jobs)



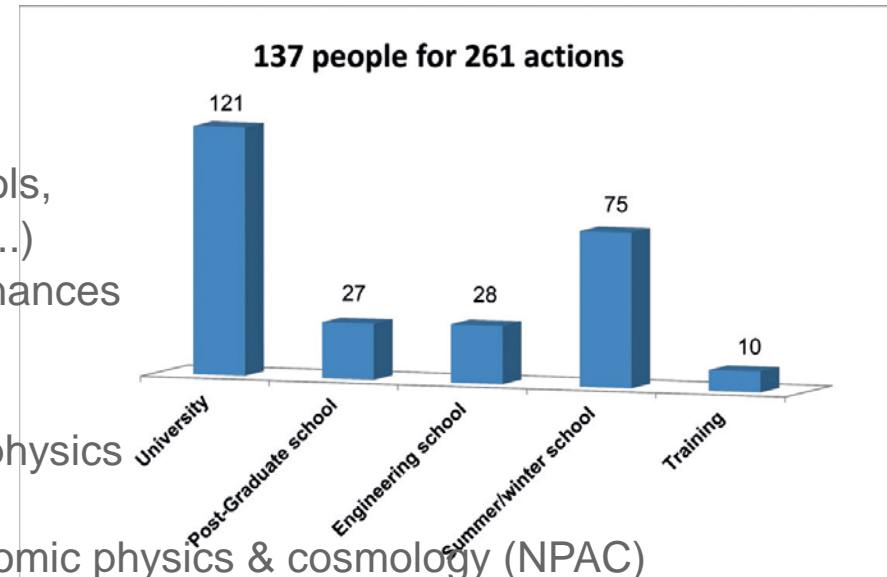
- **140 people (engineer, researcher) involved in teaching activities**

- 261 actions, 2500 hours per year

- Broad spectrum of courses, covering all IRFU topics
- Wide type of courses (Engineering schools, University, INSTN, Post-Graduate Schools,..)

- Strong involvement in the Master 2 governances

- Co-responsible of a new master on large instruments within Paris-Saclay (SACM)
- Co-responsible of the Master 2 on astrophysics (AIM & SAP)
- Co-responsible of the Master 2 on subatomic physics & cosmology (NPAC)



- **Promotion of IRFU research to students:**

- Annual Masters day: open day for third year degrees students and higher

- 80 students/year

- P2IO Summer School « Rencontres des deux infinis »: 2 weeks in July (under and post-graduate students)

- Traineeships for all levels of education (300 k€/year, 90 in 2012)

- Many other actions: CERN MasterClass, secondary schools visits and conferences,..