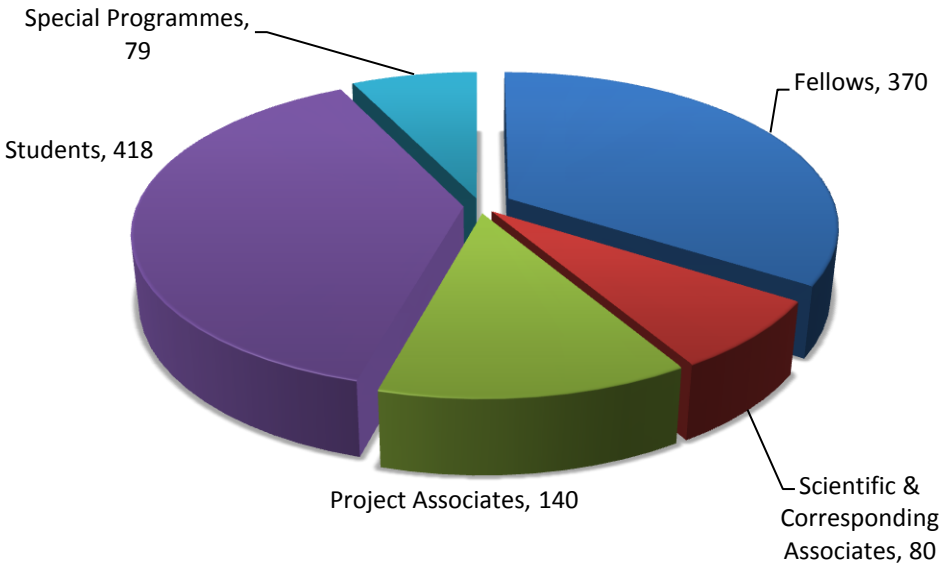
The Fellows, Associates and Students Programmes CERN/SPC/960

James Purvis

Group Leader, HR-RPM

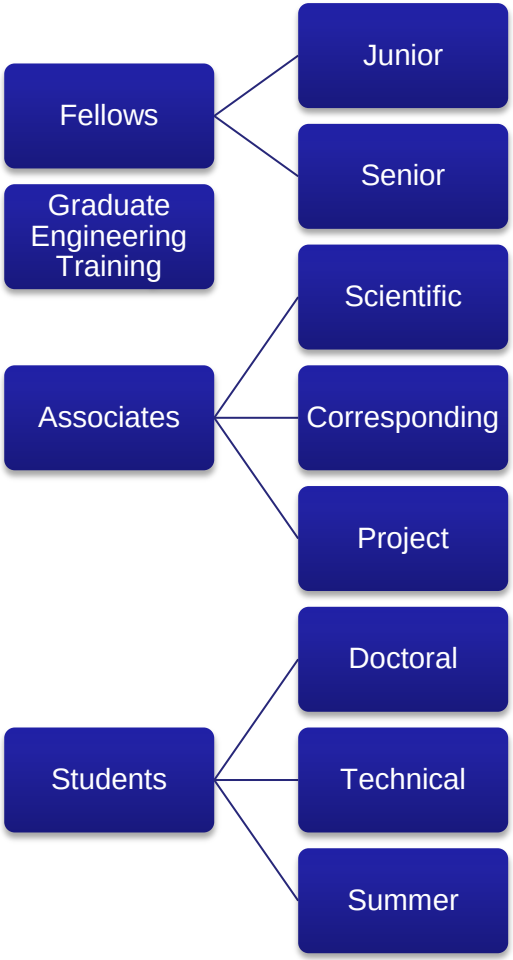
Overview



- Approximately 1200 persons participate every year in CERN Programmes: Fellows, Associates, Students (FAS) or Special Programmes.

- The above programmes cover all profiles, from undergraduates to senior scientists & engineers

Programmes

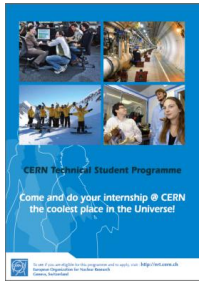


- **Fellows:** young physicists and engineers (from junior engineers to post-doctoral research physicists) from member states, normally staying two years.
- **Graduate Engineering Training:** Programme introduced in 2009 to leverage engineering training opportunities at CERN.
- **Scientific Associates:** senior scientists spending at CERN up to one year.
- **Corresponding Associates:** senior scientists from *all but the largest four member states*, spending at CERN up to six months.
- **Project Associates:** physicists, engineers and technicians sent to CERN by their home institution for periods up to three years (five years for LHC completion).
- **Students:** several sub-programmes, catering for different seniority levels (from undergraduates to Ph.D. candidates) and offering different durations (from 2-3 months for Summer Students, up to 3 years for Doctoral Students).
- **Special Programmes:** externally-funded initiatives enabling additional researchers to participate in CERN programmes.

Achievements 2005-2009

- Major Recruitment Drive

Facebook



Posters

Google Earth

YouTube Broadcast Yourself™

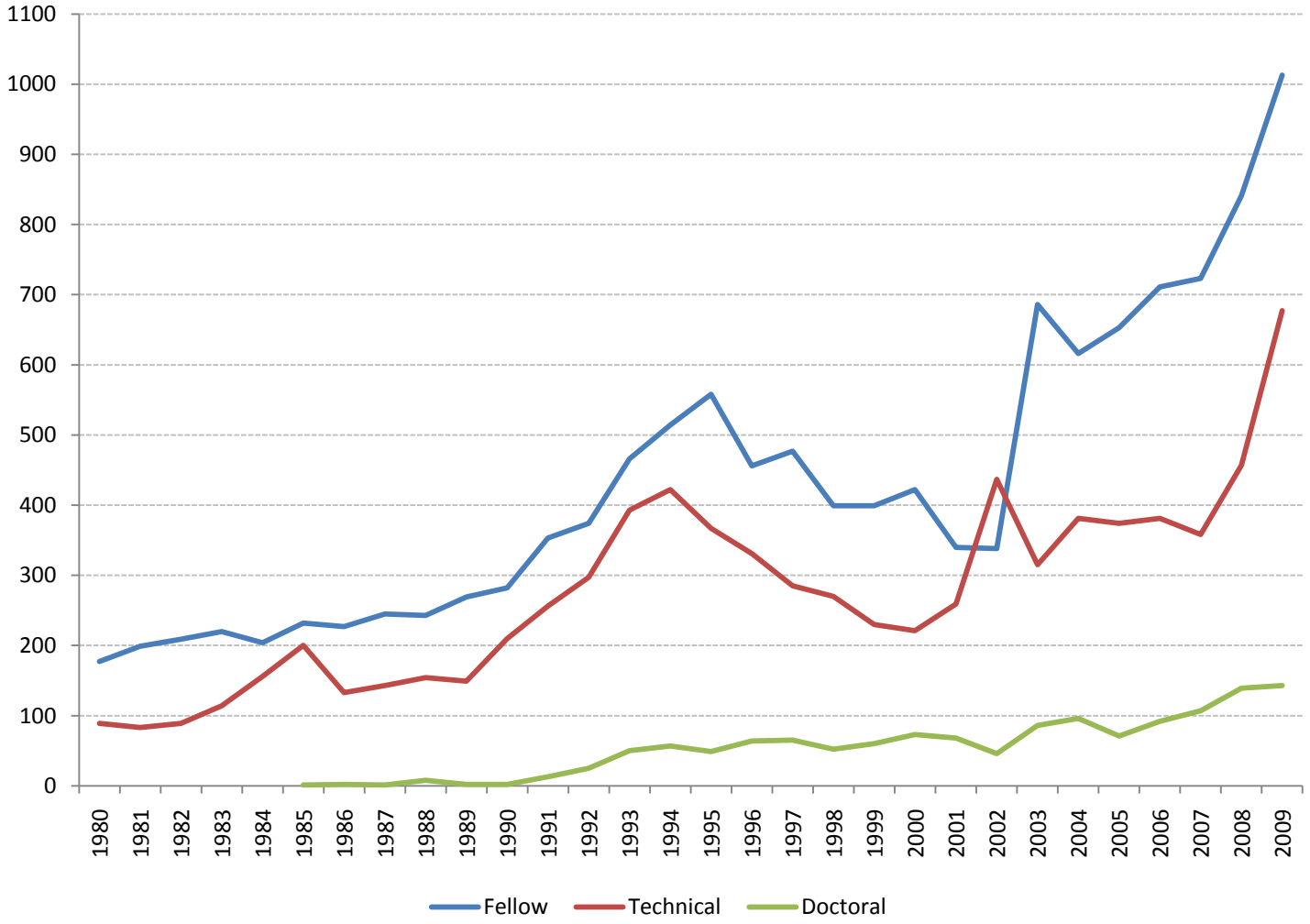
YouTube Video

+~70% more applicants than 2004

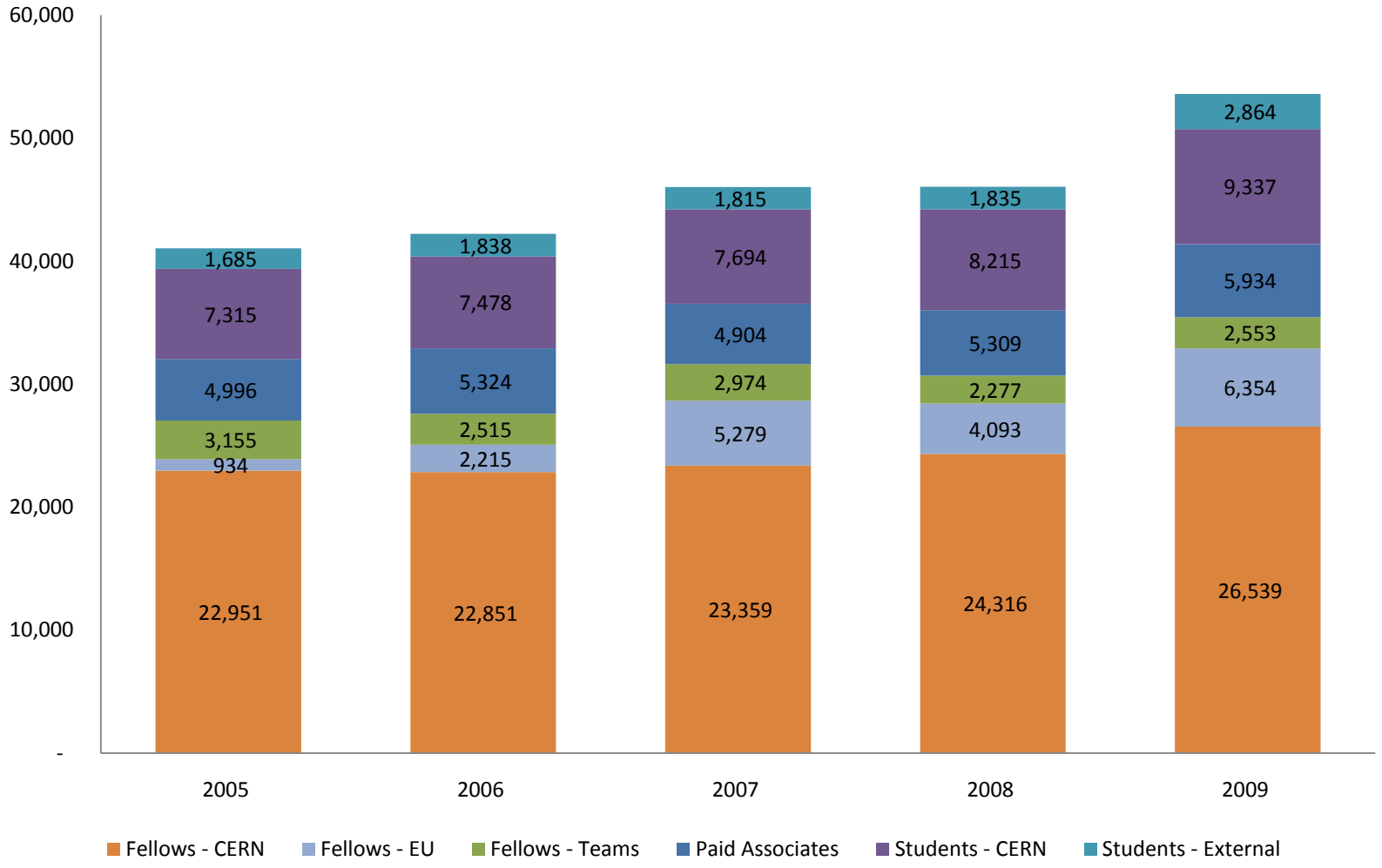
KPIs and pro-active monitoring of actions

- Increased Marie-Curie Success and COFUND
- Increased focus on engineering disciplines : introduction of GET
- Process Improvement
  - Introduction of exit Questionnaires
  - Quotas replaced with flexible swiss-franc management, guidelines revisited
  - Paperless selection for AFC & TSC. New Tool for Summer Student selection
- Increased agreements and external funding

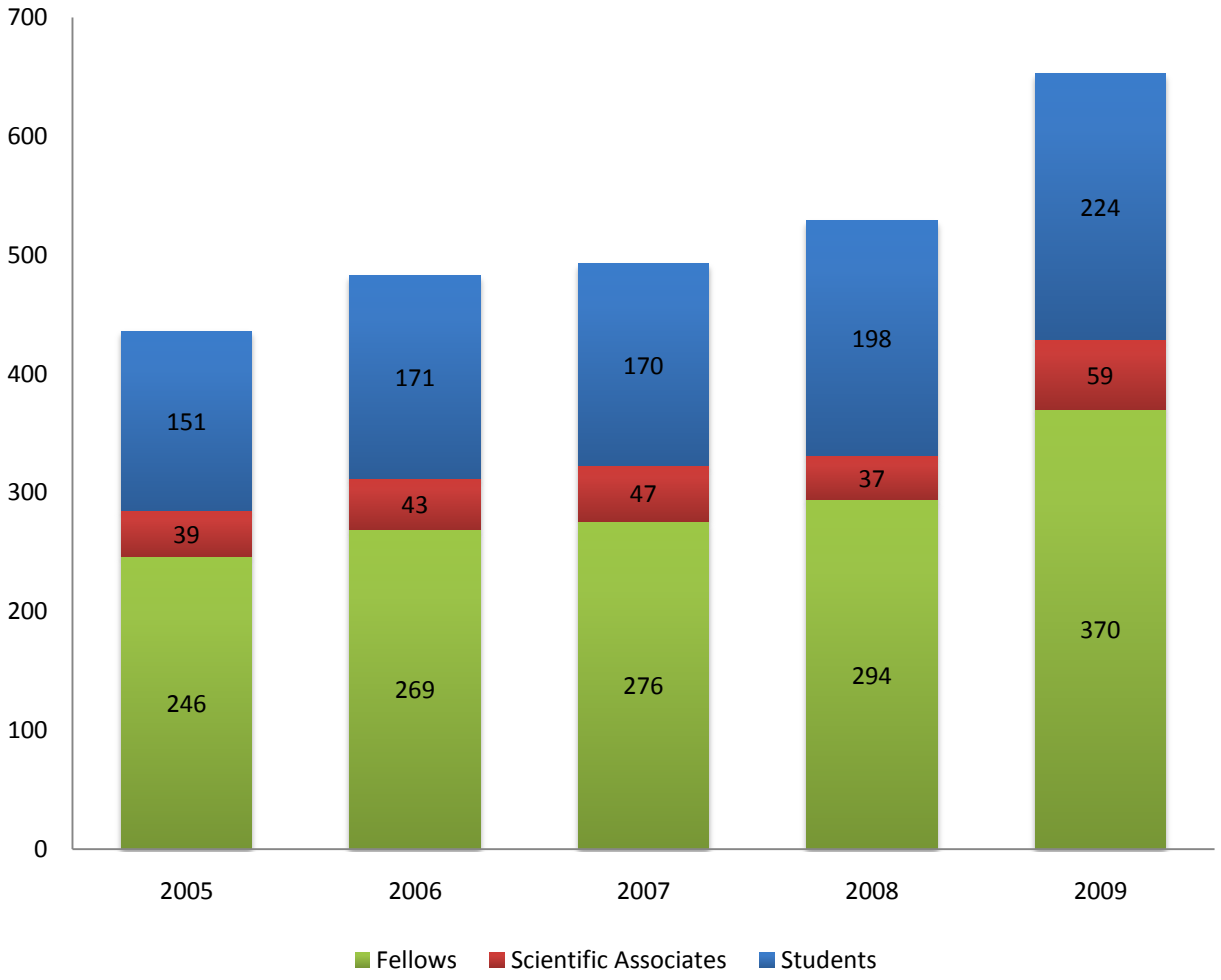
Applicant Evolution



Financial Data



Programme Evolution



Procedures

Candidate

e-recruitment

Referees

Completed application

HR

Academic Excellence

Eligibility Experience Discipline Nationality

Research Fellows

Senior Applied Fellows

Junior / Students

External Ranking

Internal Ranking

Departments

Selection Committee

Procedures

Associates & Fellows Committee

- Dr. L Camilleri, Dr. R Voss (2007)

Technical Students Committee

- Dr. E Heijne, Dr. S Russenschuck (2010)

Summer Student Lecture Programme Committee

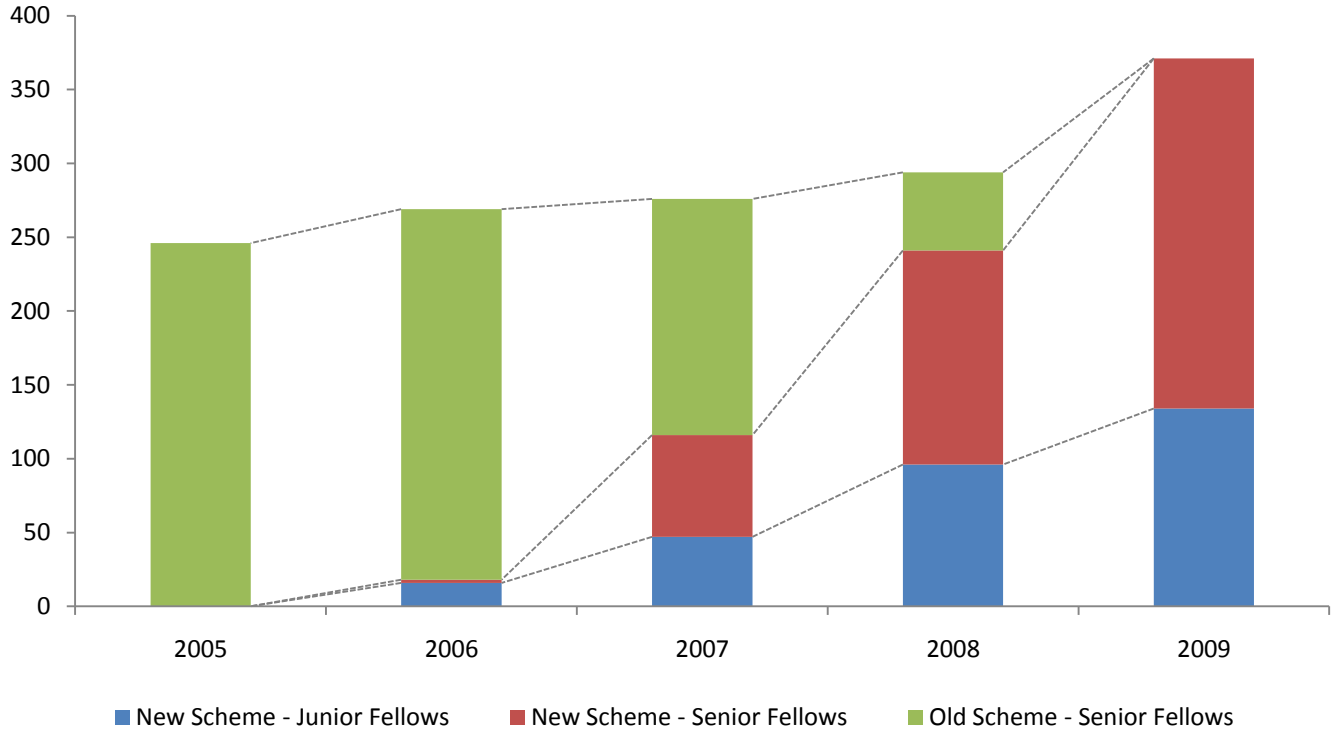
- Dr. F Cerrutti, Dr. J Wells (2009)

Selection Committees

- Takes selection decisions
- Ensure fairness & transparency across departments
- Ensure excellence
- Raise & decide on Policy issues

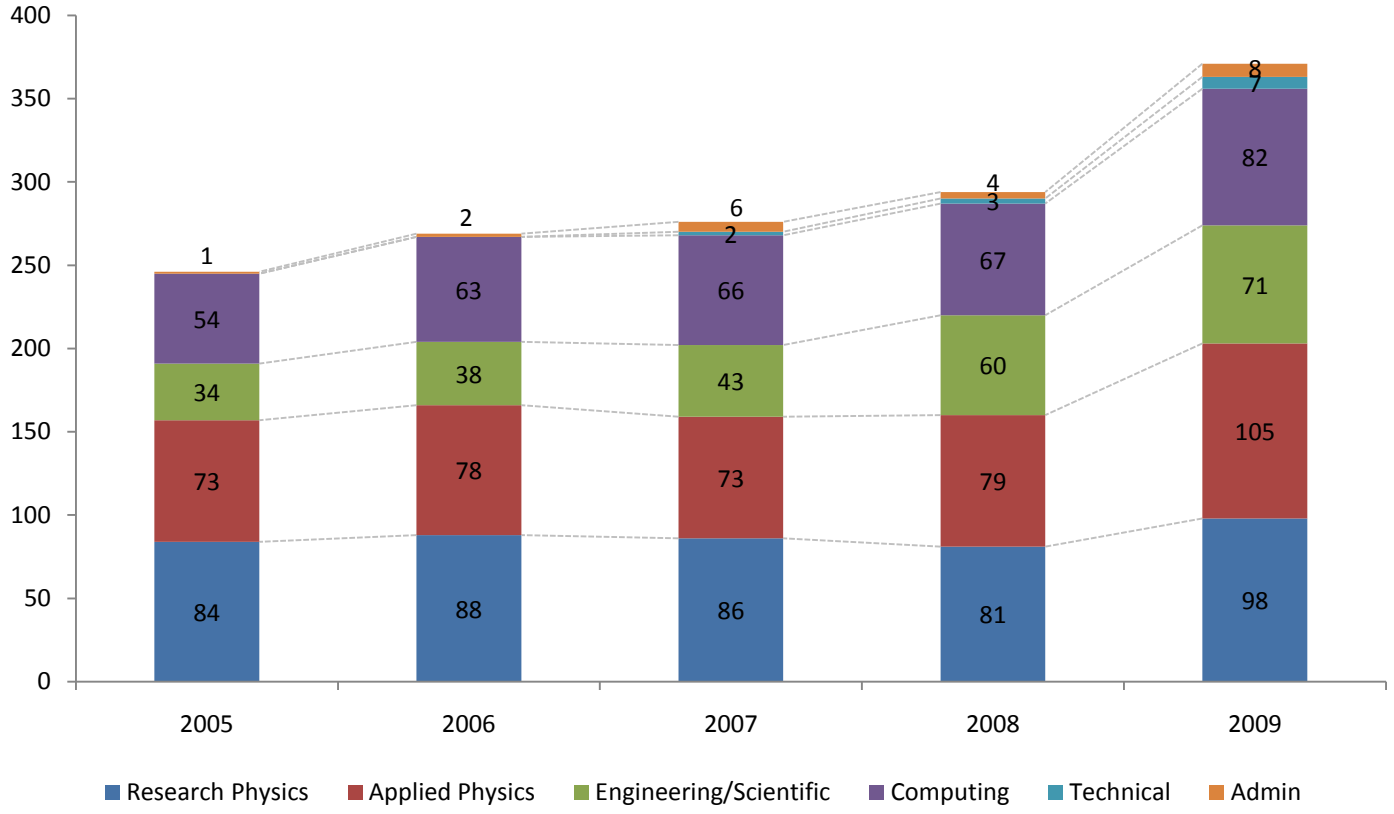
1975 Fellows Selection Committee in Salle B

Fellowship Programme



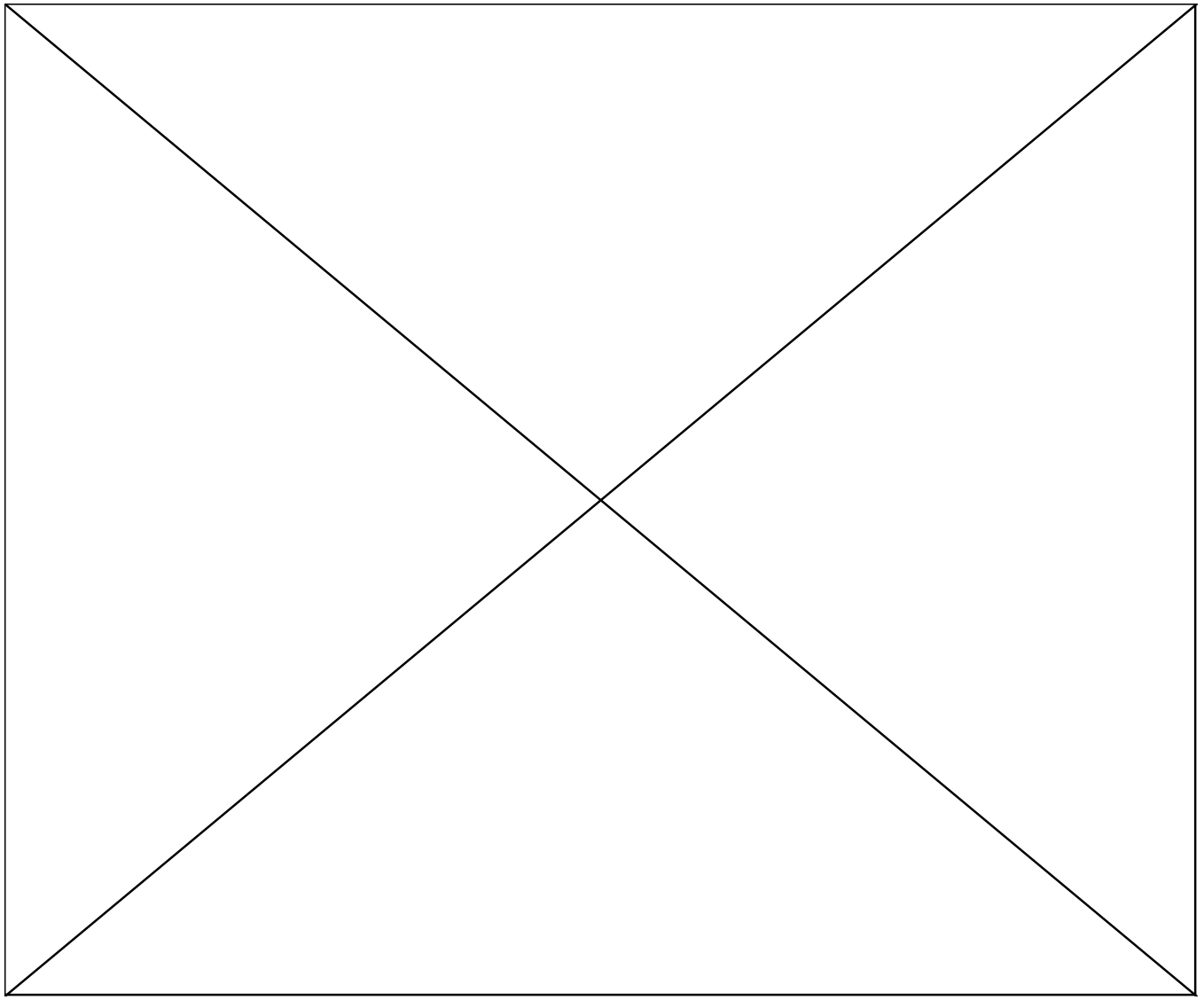
Introduction of Junior & Senior sub-programmes clearly demonstrated

Fellowship Programme

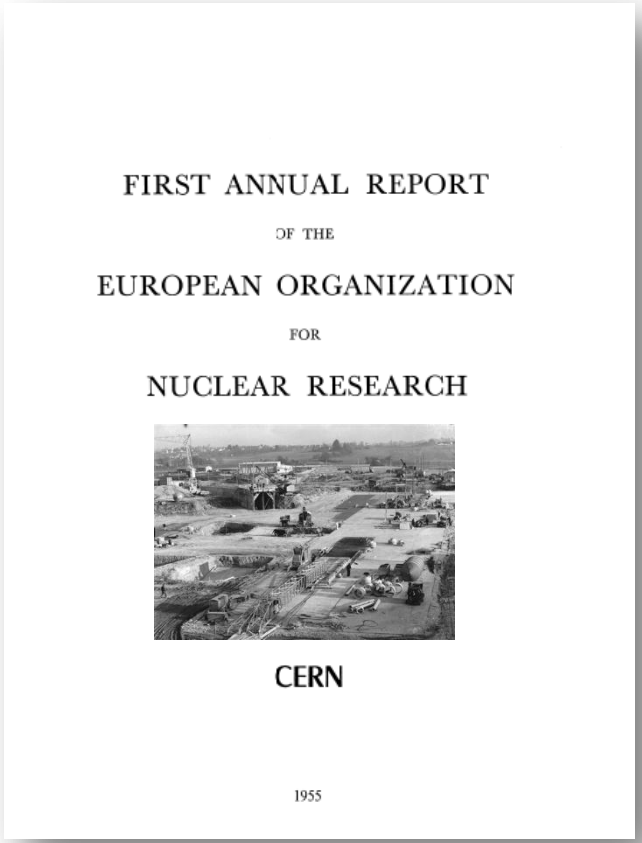


Overall Increase in Fellowship Opportunities

Broadening of Scope of Fellowship Programme



GET - Why new programme?


FIRST ANNUAL REPORT

OF THE

EUROPEAN ORGANIZATION

FOR

NUCLEAR RESEARCH

CERN

1955

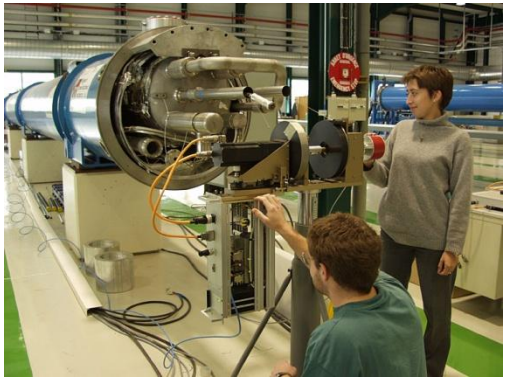
"*recruitment is becoming increasingly difficult – especially in the **engineering** and **technical** branches*"

Excerpt from 1955 CERN Annual Report

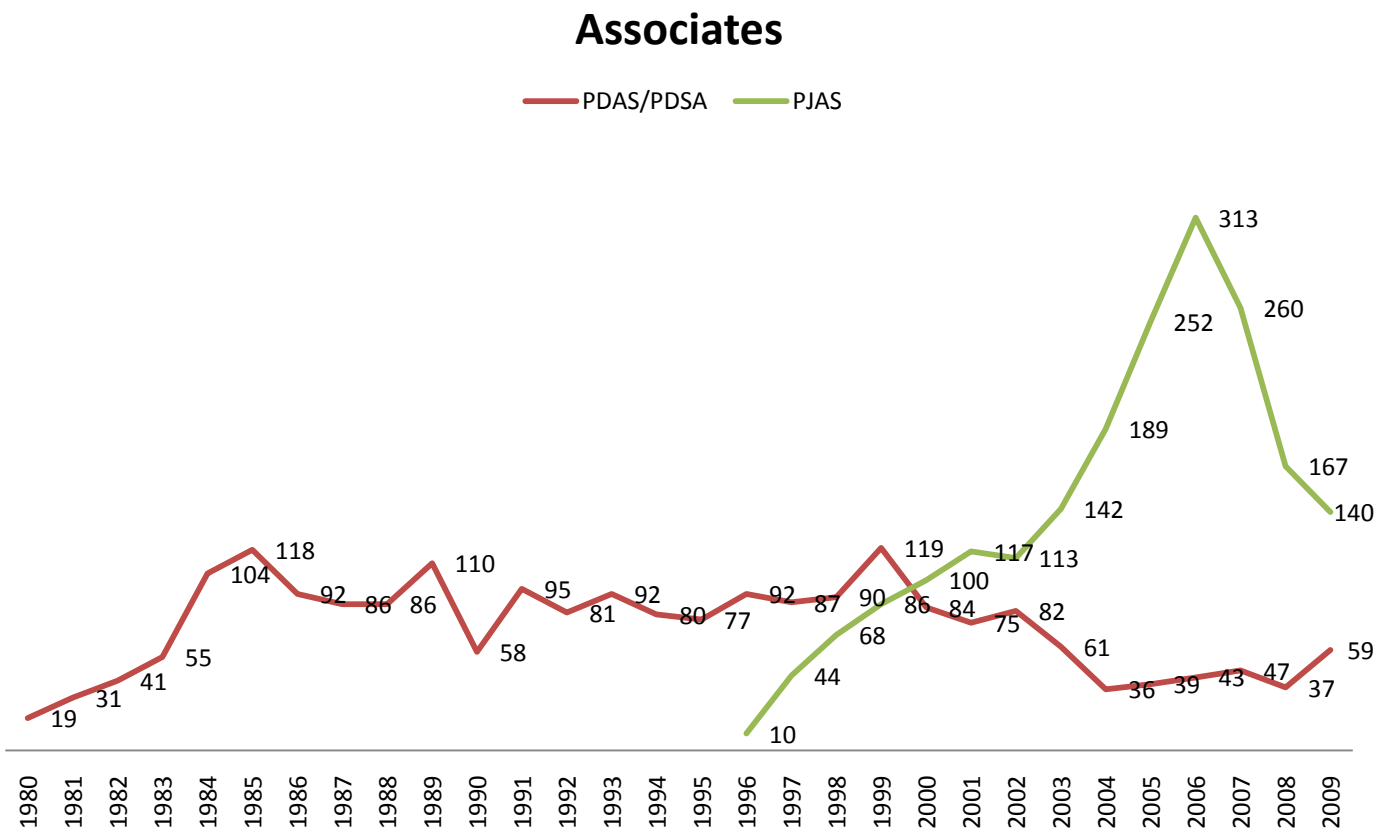
- Attracting Engineers to CERN has always been difficult
- "Fellowship" doesn't exist in the vocabulary of the engineers
- Want to attract the best engineers, from the best Universities.

Graduate Engineering Training

- What is it?
  - Presented to Council December 2009
  - encourage applications from talented engineers and should prove to be a positive step forward in showing CERN is also an excellent employer in engineering fields not only physics.
- Practically
  - Selection criteria adapted to Engineering Disciplines
  - Use fellowship contract criteria & AFC workflow
  - Strong Engineering Training Component
  - Focus on Knowledge & Technology Transfer in Member States
- Opportunities
  - Initially 20 appointments
  - Directorate decision to go to 40 appointments pa



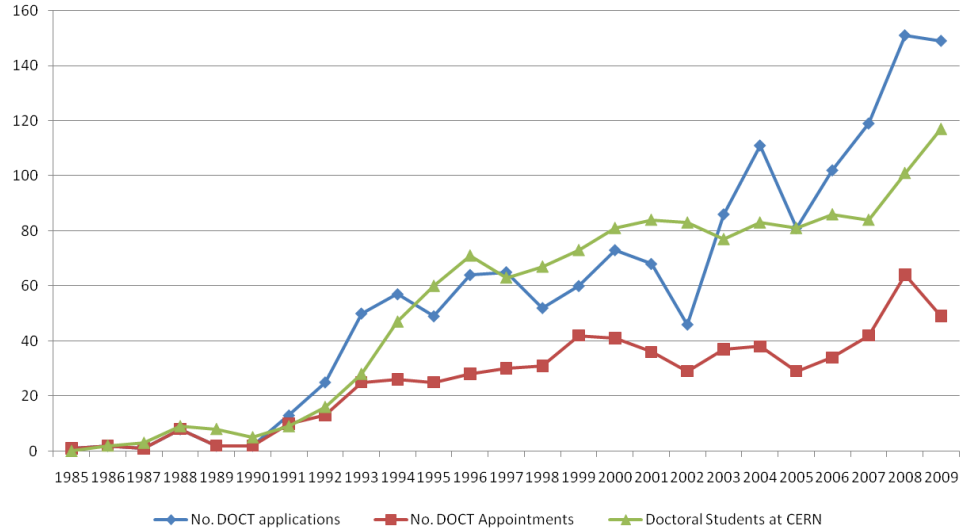
Associates

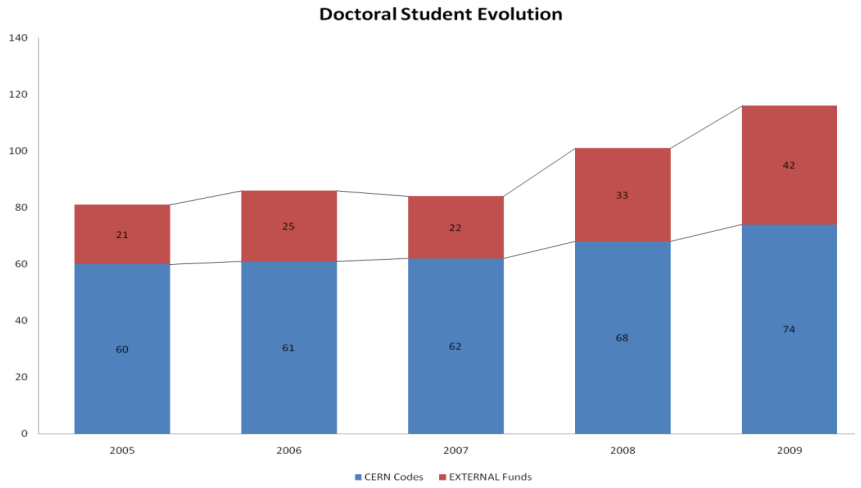


Reduction of Project Associates post-LHC construction

Shift in selections from Associates to Fellows

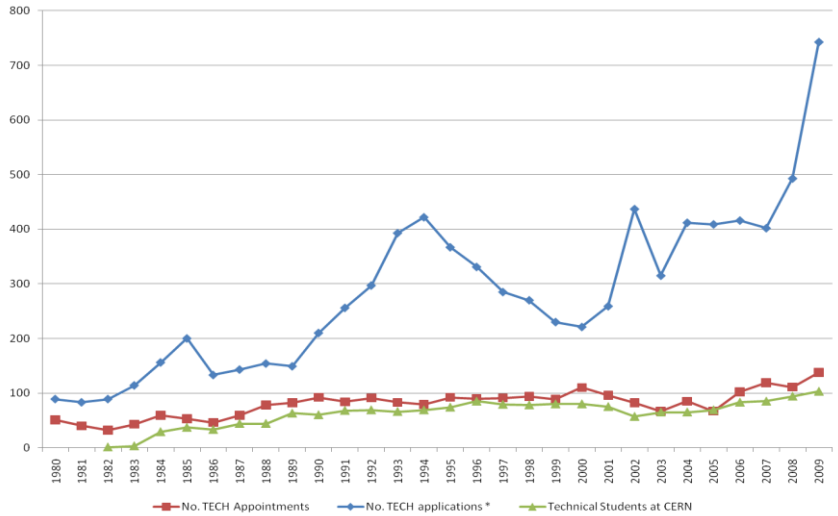
Doctoral Students

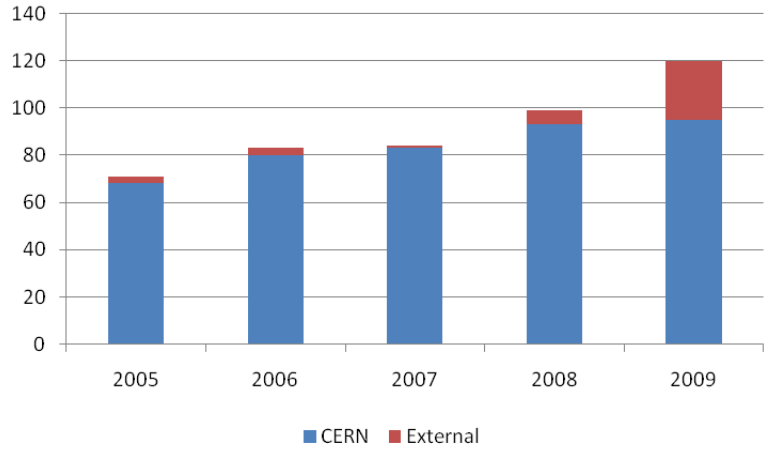




- Increasing Popularity
- Significant portion of external financing

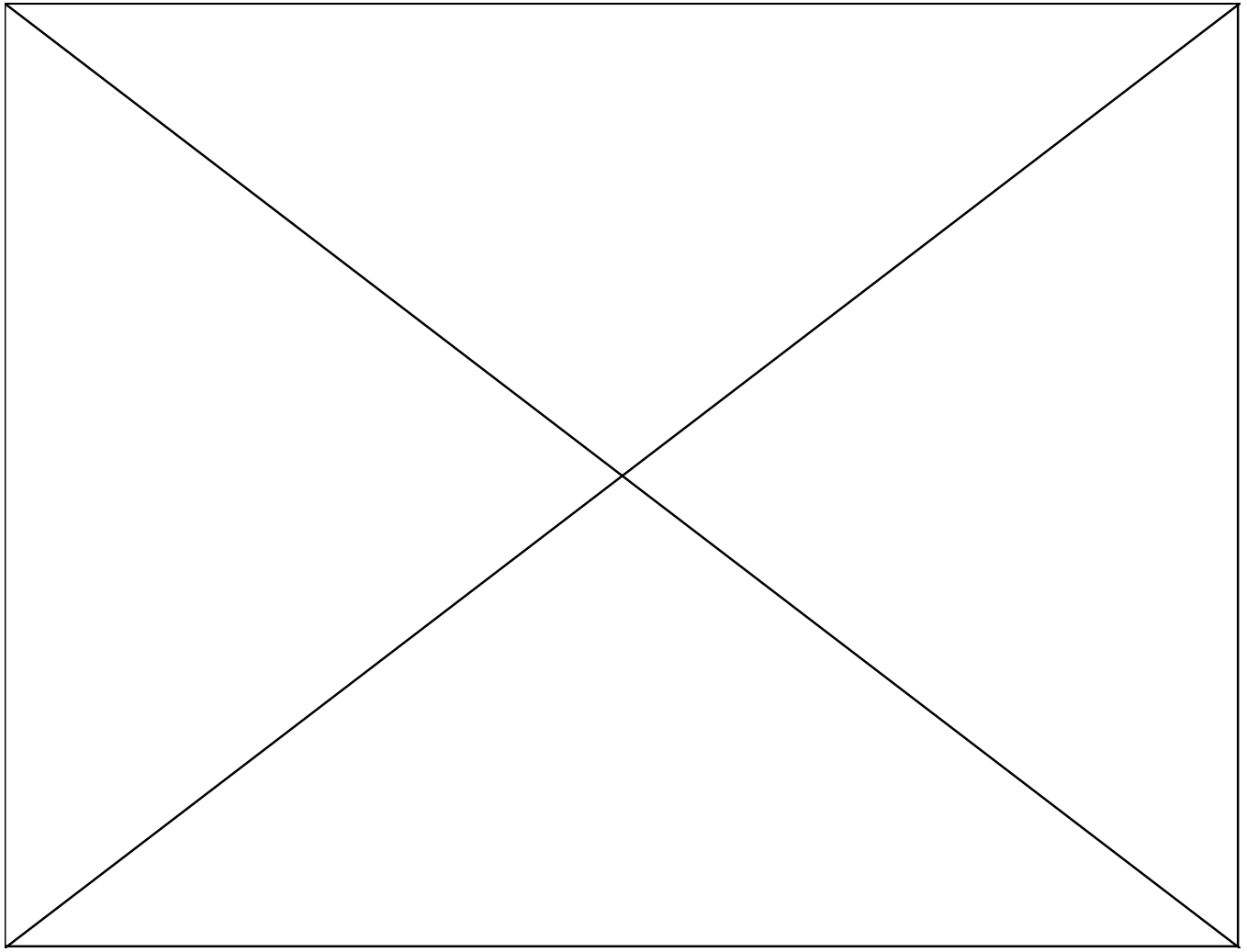
Technical Students





- Extremely Popular Programme and increasingly competitive
- Great vehicle for knowledge transfer
- Increased external financing

Student Recruitment by Country

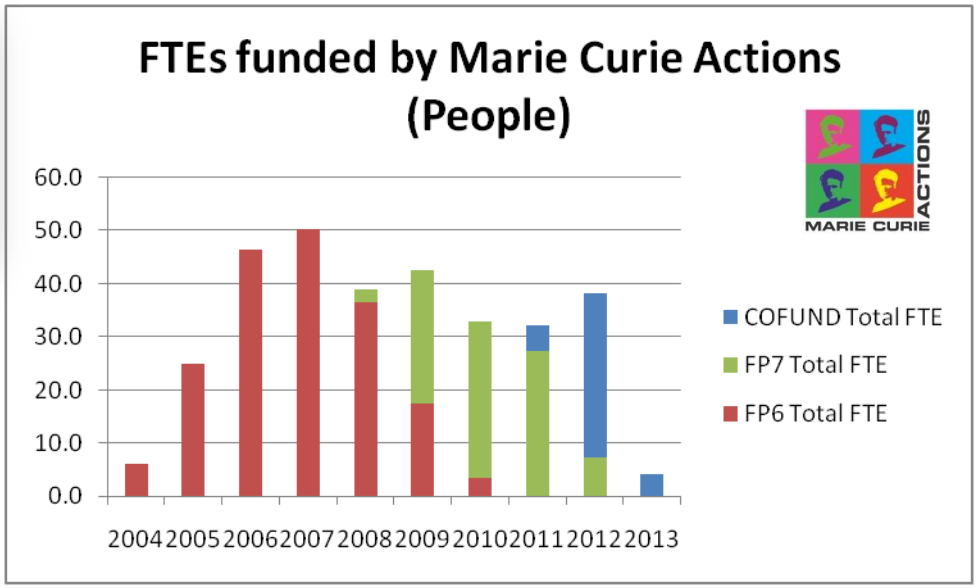


next

Summer Students

- Flagship student programme
- Highly competitive (over 1000 applicants)
- Excellent feedback
- High quality students

EU & Marie-Curie



- Unparalleled funding and training – building on successes of CERN
- Fellow years & training opportunities in addition to central budget
- FP7 Success 134 Fellow Years recruited by CERN in FP7,
- 5 M€ COFUND
- 93.96 Fellow years on other EC initiatives

Proposals for coming years

Associates

- Further appointments of Scientific Associates
- Adapt Corresponding Associates
- Maintain subsistence rates

Fellows

- Maintain senior, align junior stipends
- Maintain diversity
- Further invest in training

Graduate Engineering Training

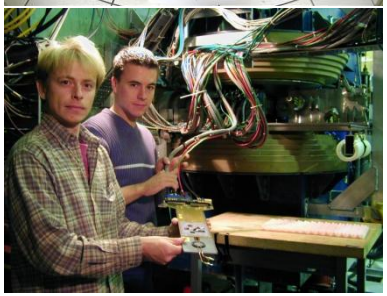
- Increased appointments

Student Programmes

- Increased Qualitative measurements

Associate Member States

- Allow access to full range of FAS programmes



Conclusions

1. CERN management proposes to maintain the current funding level of the programmes
   - FAS programmes directly contribute to carrying out CERN's mission
   - Key feature of programme is return of educated people to the MS
   - Avoid any reduction at a time when Knowledge Transfer is important

2. CERN management proposes to maintain the diverse scope of the programmes (i.e. engineering & admin as well as physics)
   - Provide first class training opportunities in a high-tech, multicultural and multi-lingual environment
   - Engineering possibilities are a CERN asset whose potential is yet to be fully realised

3. CERN management proposes to take actions to assure the continued success of these programmes
   - Aligning and maintaining current stipends and subsistences (CERN/2946)
   - Increased investment in Training

Quotes from the exit questionnaires

"An ideal place to follow the most recent ideas in physics and start new collaborations... a very rewarding experience"

" A great environment to get started in the professional world"

" Would recommend it to anyone who has just finished his education."

" This is a great place to be using cutting edge technologies that tend to arrive later in the other industries."

" Learning new skills Working with fun, talented people"

" Good seminars on different subjects; discussions with world experts "

"This internship gave me the opportunity to meet important people, especially in the research fields".

"Can't imagine a better way to spend my summer ☺"


THANK
YOU