



ÉCOLE DE PHYSIQUE

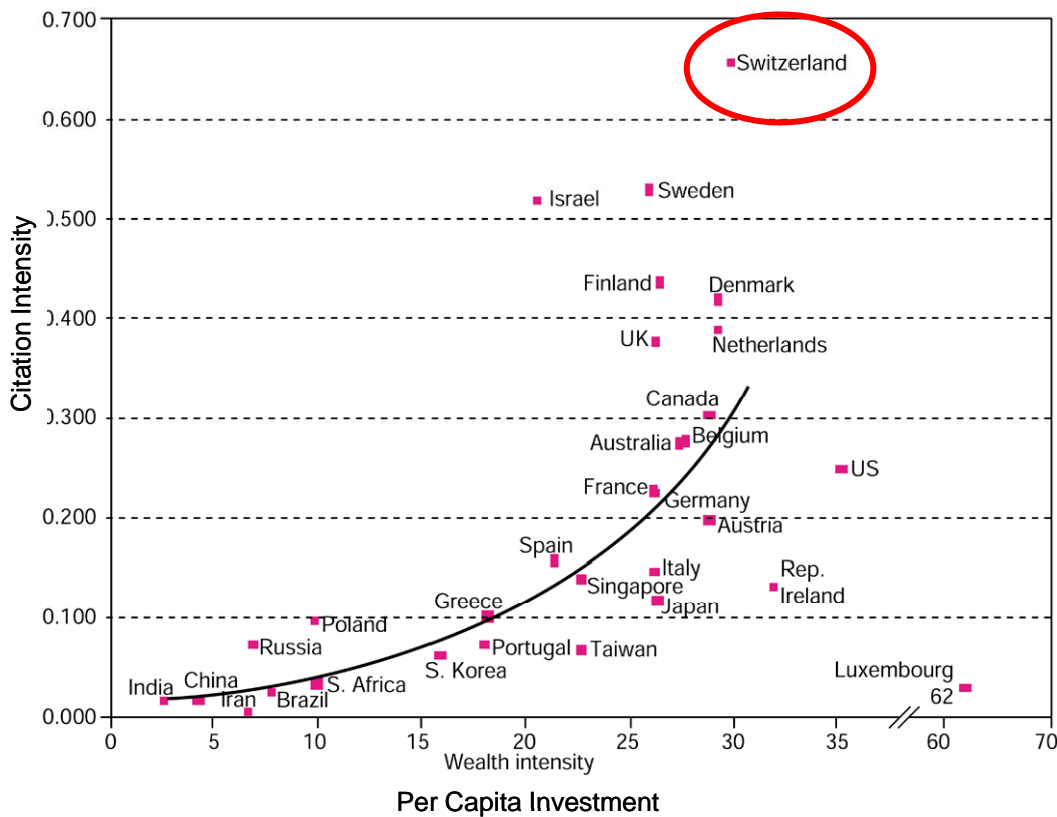
ShowPhysics 2009

Welcome to the Physics
Department at Université de Genève

March 31, 2009

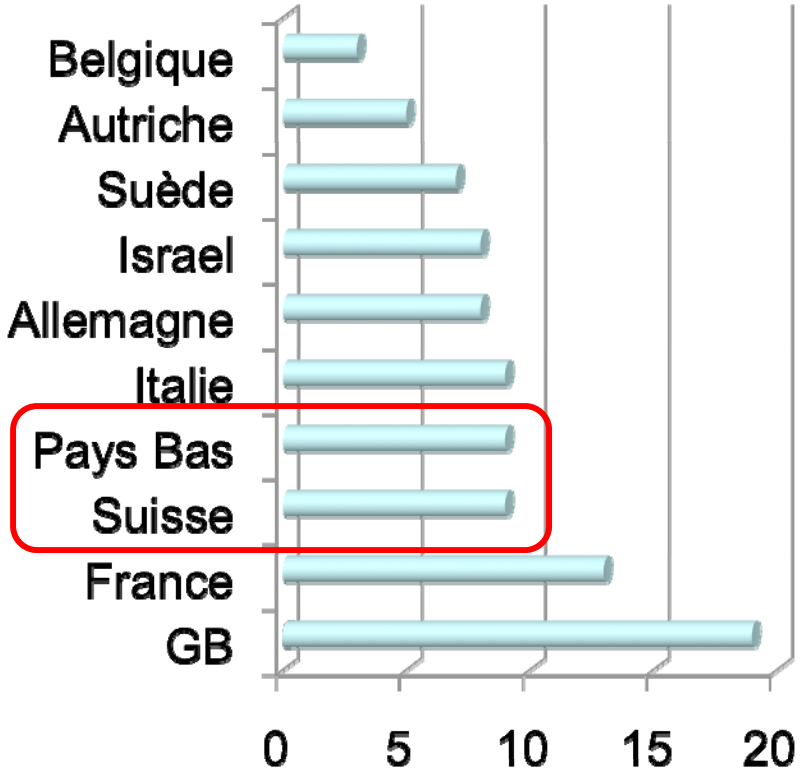
Martin Pohl
Président de la Section de Physique

Sciences@CH: Investment and impact



Source : Nature, juillet 2004

ERC Advanced Investigators Grants



Source : Physik Journal novembre 2008

Science@UniGe

- 117 professors
- 183 academic collaborators
- 549 assistants
- 369 technical collaborators
- 122 administrative staff

+16% new students 2008

1850 students, including >500 doctoral students

495 diplomas delivered in 2007

- 161 Bachelors
- 202 Masters and post-graduate certificates
- 96 PhDs
- 150 MChf budget per year

HORIZONS

L'UNIGE en tête des universités généralistes francophones

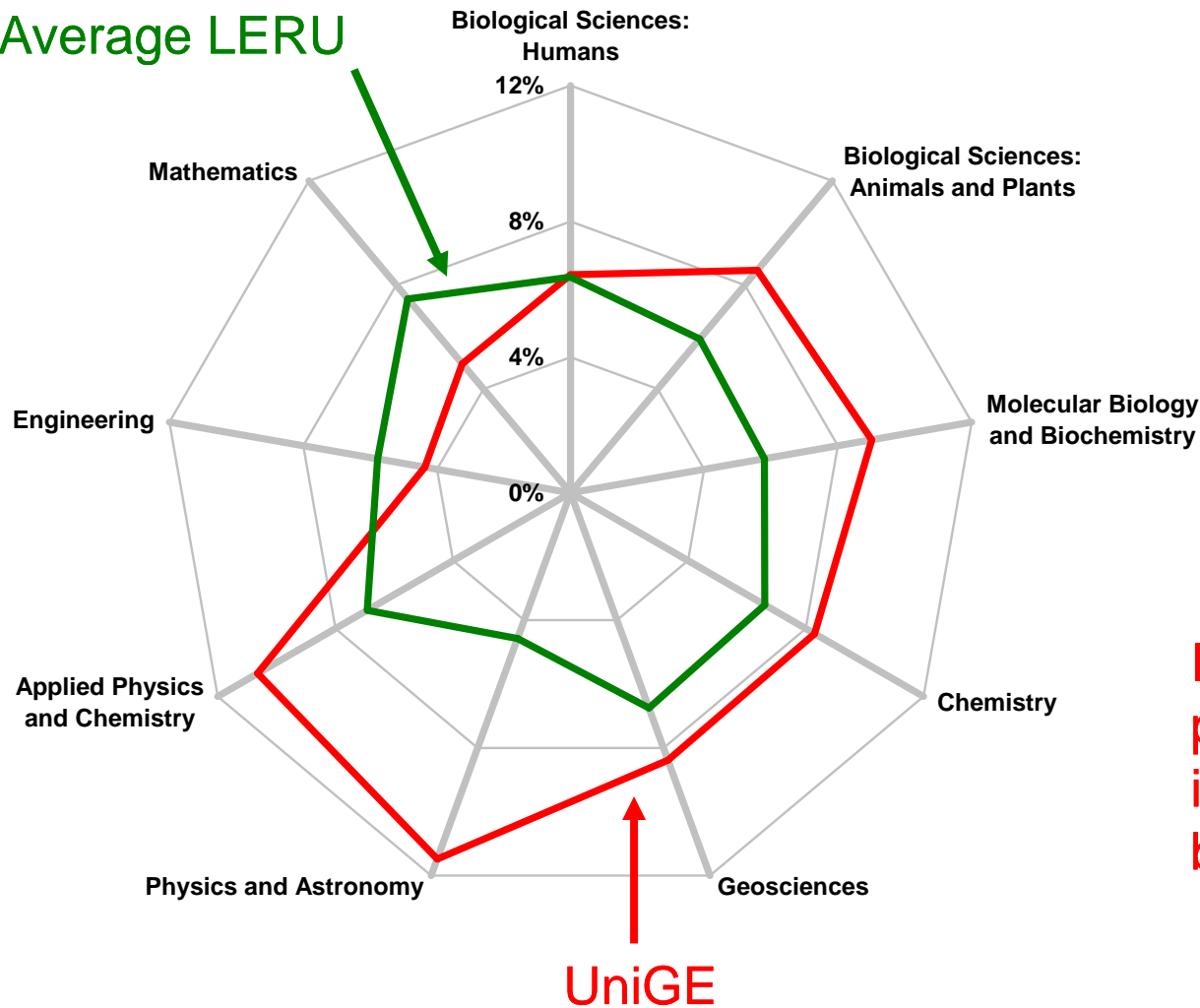
| COMPARATIF | Le dernier classement mondial du «Times Higher Education» confirme l'excellente position de la Suisse sur le plan académique. Il met également en avant le rôle leader de l'Université de Genève parmi les hautes écoles généralistes francophones.

Les universités suisses améliorent globalement leur position dans le classement mondial des universités rendu public le 10 octobre par le Times Higher Education (THE), l'un des plus médiatisés du genre. L'UNIGE est même l'université généraliste la mieux évaluée du monde francophone, si l'on met à part l'École normale supérieure de Paris, dont l'entrée est soumise à concours. L'UNIGE est également l'université cantonale la mieux classée de Suisse.

RAYONNEMENT INTERNATIONAL
«Ce résultat est d'autant plus remarquable, commente Claus Haessig, responsable du secteur recherche



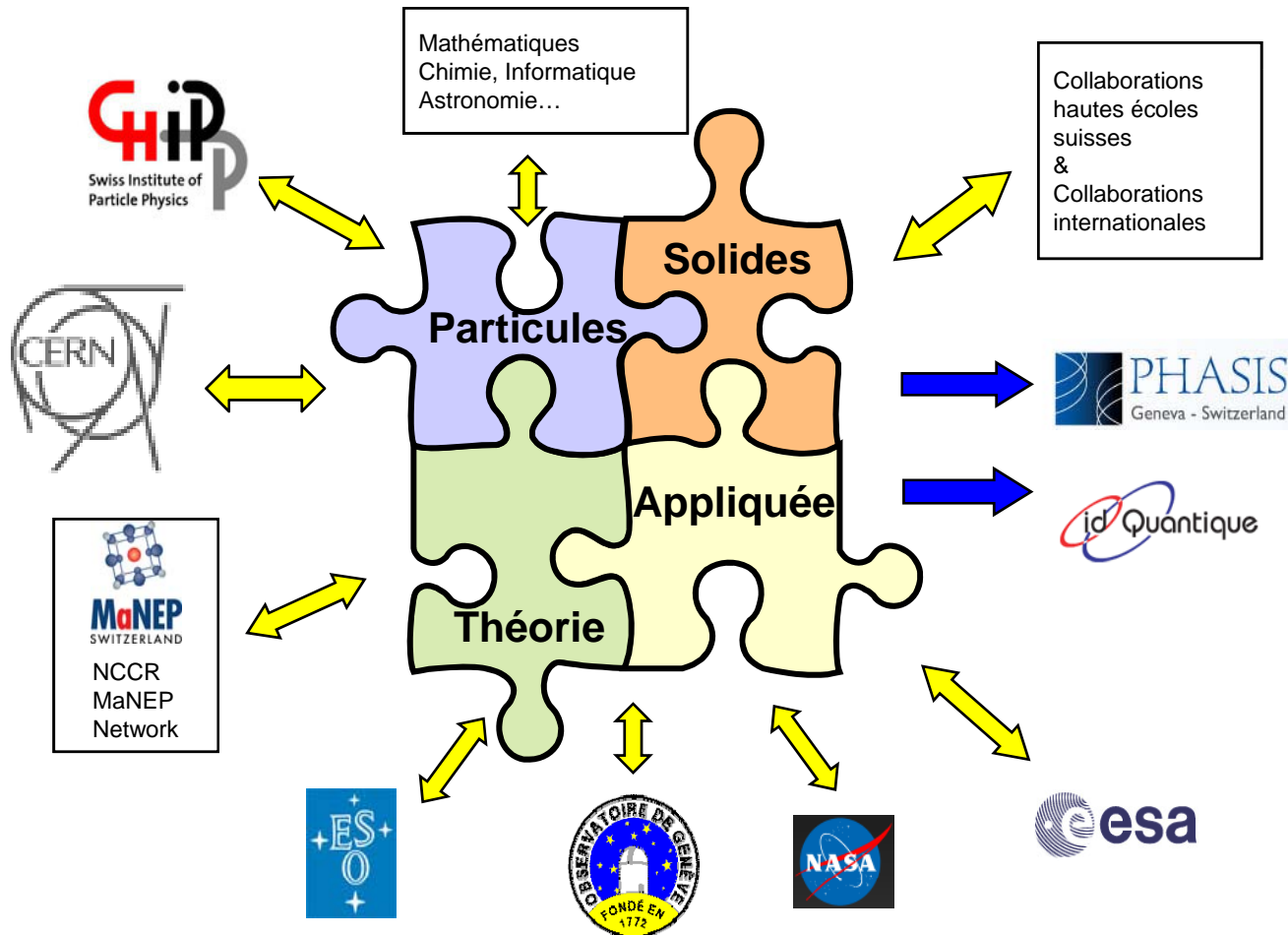
Average LERU



Source : LERU and CWTS (Uni Leiden/NL)

Impact of the scientific production in international comparison, by domains.

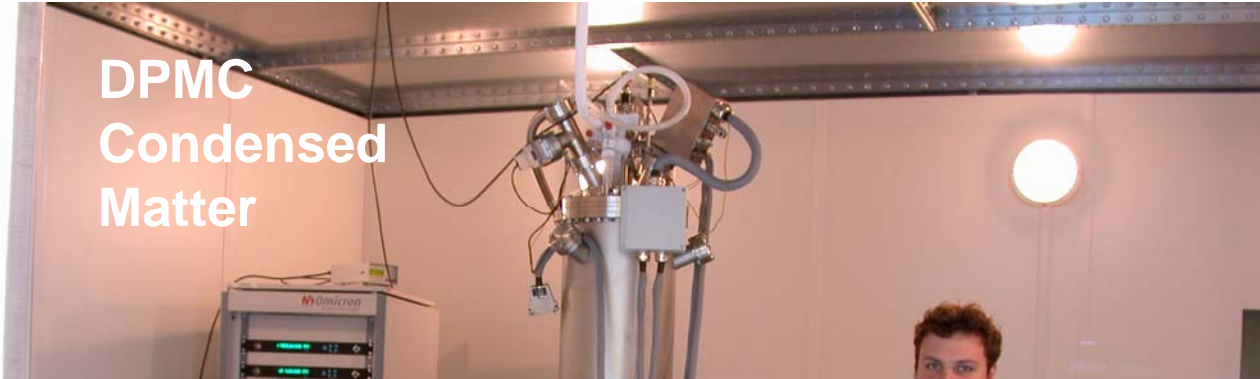
The UniGe Physics Department



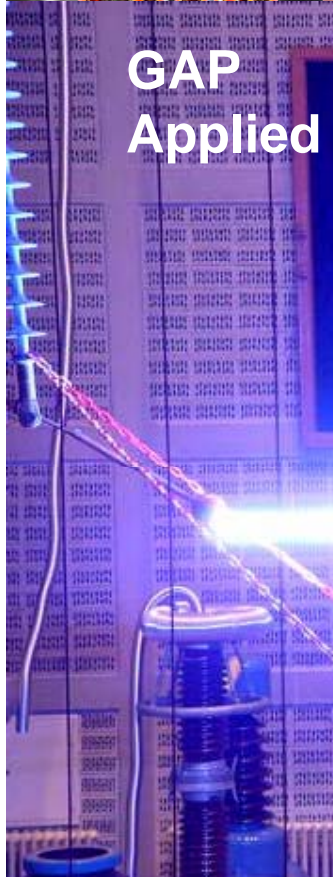
- 25 professors and 11 senior staff
- 170 scientific staff
- 96 administrative and technical staff
- ~170 students, ~80 PhD students
- Total budget 27.5 MChf, 35% third party
- Intensive collaboration with internal and external partners



R



DPMC
Condensed
Matter

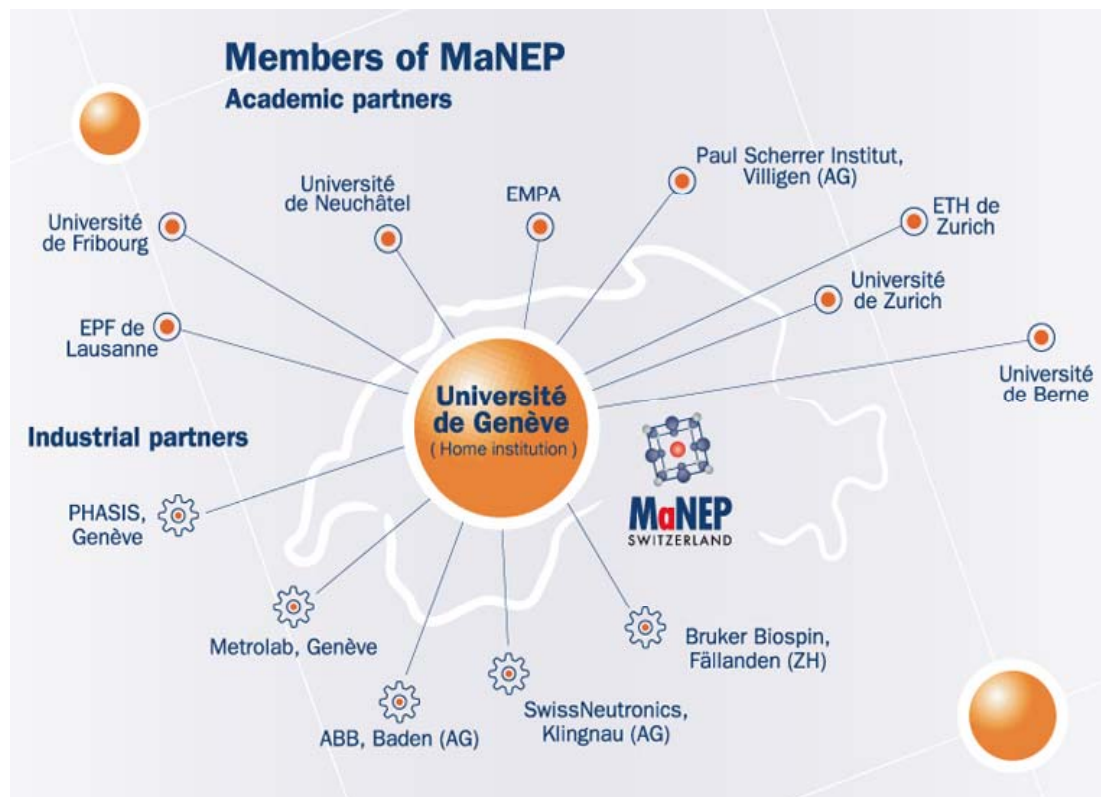


GAP
Applied



Observatory
Astronomy
Astrophysics

Materials with Novel Electronic Properties



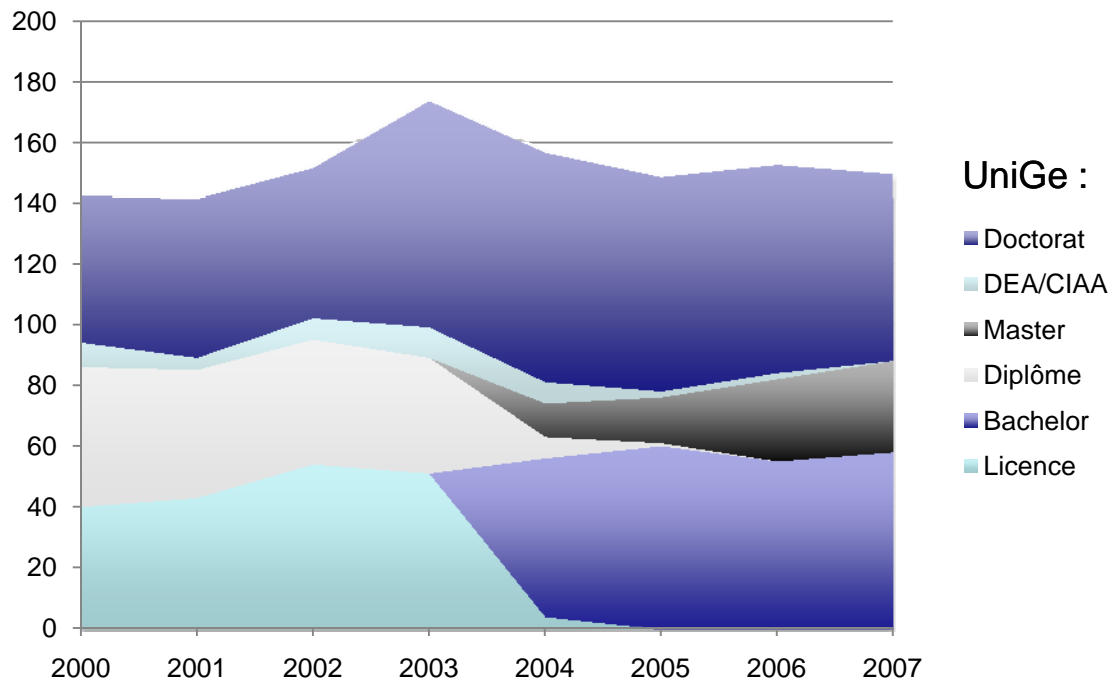
- National pole of excellence in research of the FNRS since 2001
- 10 institutions, 6 industrial partners, ~300 scientists
- Leading house: University of Geneva, Physics Department
- Annual budget 15 MChf, 1/3 from FNRS

CH student statistics for 2007/08

Total number of physics students 2007/8: 2180 (constant since many years)
 of which are women 399 18%
 of which have foreign nationality 808 37%

Total number of physics PhD students 724
 of which are women 154 21%

Total number of particle physics experimental PhD students 89



Recent example:
 +16% new science students in 2008 at UniGe

New peak or sustained growth?

The Bologna System:

Constructs a European space of higher education:

- Mutual recognition of university degrees: bachelor, master, PhD
- Free exchange of students between participating universities
- System of ECTS credits for courses, obligatory evaluation
- Simplifies process of equivalences when one changes university
- ERASMUS program encourages this exchange

Swiss Universities participate in the Bologna system basically since its creation

Studying Physics in Geneva

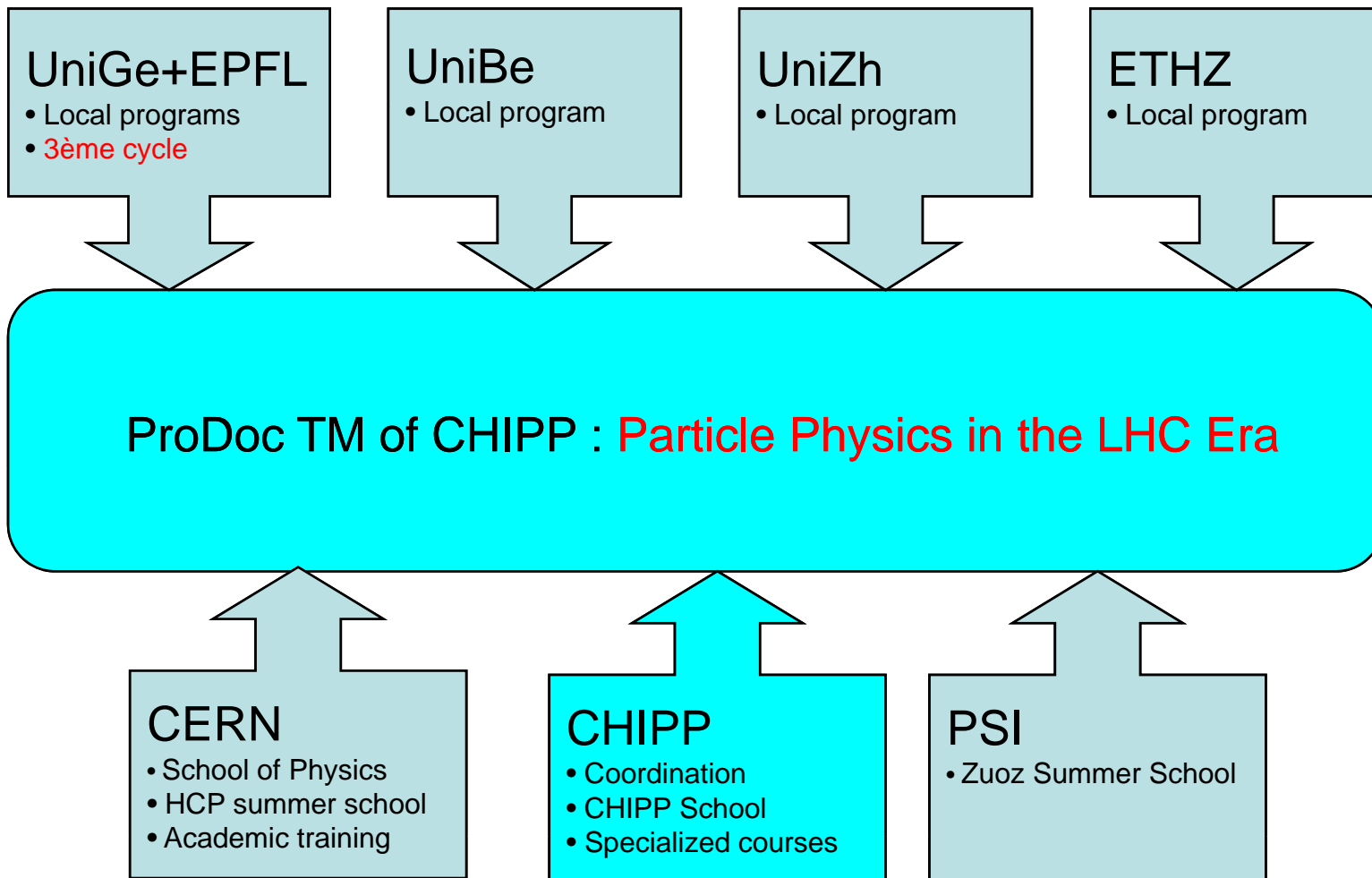
Studying physics is difficult but worth while!

And we are there to make it worth your while:

- Excellence in education and research
- Enthusiastic teaching staff
- Open and active teacher-student relations
- Up-to-date didactic material
- Experimentation and new applications of physics
- Large choice of specializations

Competitive at European and world-wide scale...

Project: Cooperation in doctoral studies



Enhance physics teaching in secondary education

- Regular fresh-up summer courses for physics teachers
- Organised on Cantonal level (like school system)
- Few chairs for Didactics of Science:
 - Geneva (Physics, Life Science)
 - Basel (Physics)
 - Fribourg (Science)

Important for sustainable
development



Conclusions:

- Switzerland is an excellent place to do science
- Geneva is a lively place, where students, teachers and researchers work together in close collaboration
- Striving for excellence in research and teaching, competitive at the national and international level
- Bologna system implemented early, international atmosphere
- Unusually large fraction of doctoral students
- Action to federate teaching at PhD level
- Action towards young people, school teachers and general public
- Action to attract even more foreign students, especially at master level

A « campus » in the heart of the city



Show Physics 2009

We wish you an excellent conference