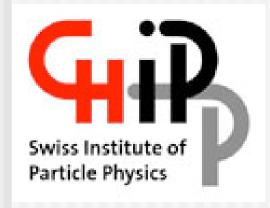
## **Outreach Activities**



#### G. Dissertori

ETH Zürich



**CHIPP Plenary Meeting,** 

PSI, October 2006



## Content

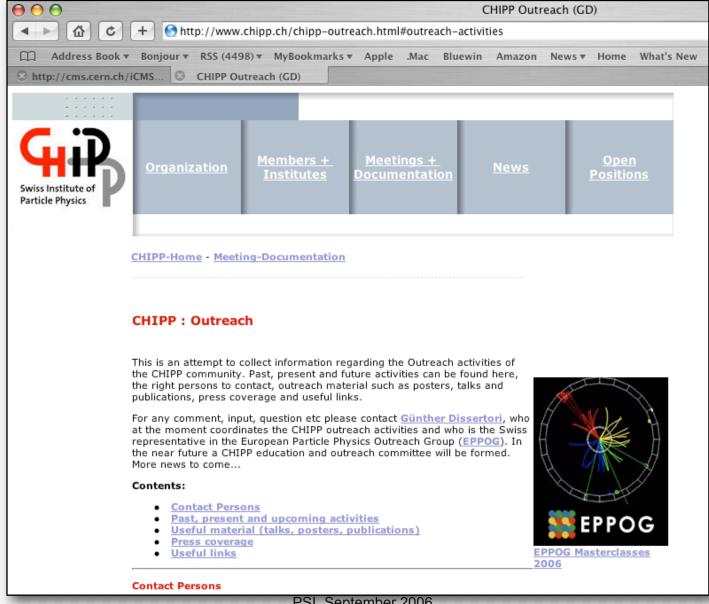


- Summary of activities last year
  - Schweizer Jugend forscht
  - Masterclasses
  - EPPOG
- Proposal for a CHIPP school



## Reminder: Web site



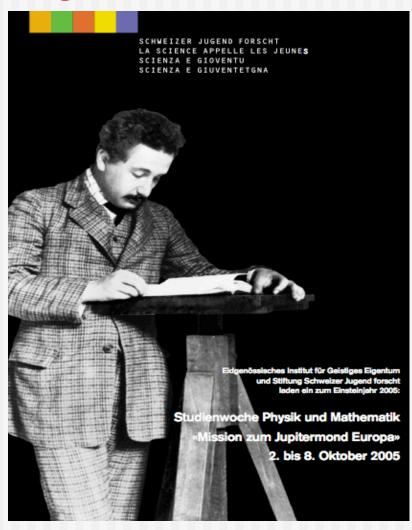






### Studienwoche Schweizer Jugend forscht

- 1 week (2.10 8.10.05) of scientific work by high-school students in several Swiss Institutions
  - 9 students at CERN, under ETH supervision
  - projects : cosmic rays, crystal properties, simulations
- On Saturday: all met in Bern, presentations by them
  - our group won prize for best presentation
  - ESA invited them to launch of VENUS Express
- Articles on CERN bulletin and several Swiss newspapers











#### NOTE

- SJF would like to have similar weeks at CERN every year
- in contact with Rolf Landua
- They would need supervisors, Swiss if possible!









### European Master Classes

- first time that Swiss Institute participates in the European Master Classes
- Organization by EPPOG (mainly Prof. M. Kobel, Dresden) and CERN
- hands-on experience for high-school students
  - introductory presentations
  - analysis of event displays
  - determination of Z branching ratios
- in the afternoon :
  - video-conference, with CERN as host and students from several countries
- ETH Zurich was part of it (March 10, 2006)
  - mainly thanks to work by Ch. Grab
  - had 28 students at the Hönggerberg
  - our group was winner of the quiz
- next year hope to involve also other institutes





European Master Classes



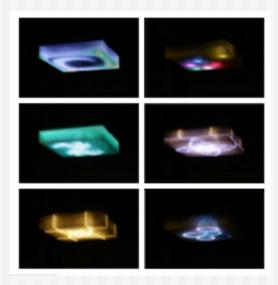






#### in Zürich

- ETH / CMS is present at the ZH Hauptbahnhof via NOVA: <a href="http://www.nova.ethz.ch">http://www.nova.ethz.ch</a>
- contribution from S. Dambach, Ch. Grab, U. Langenegger



#### in Bern

- regularly: "Physik am Samstag" Events
- http://www.physics.unibe.ch/index.html
- Very nice re-vamp of the Institutes Web site
- http://www.lhep.unibe.ch
- Press release for the start of the Opera experiment:
- http://www.kommunikation.unibe.ch/lenya/kommunikation/live/medien/mitteilungen/news/2006/ neutrinos.html





#### contacts to teachers

- Ch. Grab has organized a special one-day workshop for teachers at ETH Zurich
  - on September 8, 2006
  - 10 teachers
  - work a la Masterclasses
- CERN starts to organize 1-week long workshops for teachers from various countries
  - now concentrating on country-specific issues (eg. language and teaching material)
  - this extends the yearly HST-activity (3 weeks, in English)
  - I try to act as link person CERN-Swiss teachers
  - I have established first contacts with teachers in the German speaking part of Switzerland, following it up...





- EPPOG meetings
  - was at EPPOG meeting this spring, in London
  - presented our experience with Masterclasses
    - was also involved in setting up new EPPOG website: <a href="http://eppog.web.cern.ch/eppog/">http://eppog.web.cern.ch/eppog/</a>
  - started discussions on how to go public when LHC starts up - contact national science museums in this context
  - next meeting : end of this week
  - will follow up these special LHC outreach issues
    - eg. CMS about to release a movie, featuring A. Lister
  - how do we in Switzerland organize a special public relation activity for the LHC start?





### A proposal

- wish to organize/coordinate our PhD education on a national level
- the introduction a formally unified graduate curriculum at all Universities appears hopeless
  - based on experience
- "minimal" alternative:
  - organization of a yearly 1-week summer (or winter) school, for all our PhD students
  - this seems "doable"
- Summer vs. Winter
  - next summer there is no ZUOZ school
  - if approved by you, time to organize it by, eg. July 2007, should be enough
  - afterwards: Switch to winter school?





### **Basic concepts**

- recently started discussion with R. Rattazzi and M. Shaposhnikov
- duration: one week
- Two "topical" lectures
  - 10h in total, which allows to really go into the topic
  - one theoretically, one experimentally oriented
  - topics change every year
- A set of overview lectures
  - topics : our three "pillars"
  - 3h / topic
  - focus could change every year
- Student talks and poster session
  - lack of time: maybe only 2nd or 3rd year students
  - award for best poster
- A specially invited seminar (1h)
  - any physics topic outside particle physics
  - try to get very distinguished speaker



# CHIPP school: Layout



#### A possible time table:

Time Table: Swiss PhD Summer School, version 1

Hour/day	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday2	Sunday2
09:00 - 10:00		LHC Physics	LHC Physics	LHC Physics	Student Talks	Poster Session	Astrophysics/ Cosmology	Astrophysics/ Cosmology	
10:00 - 11:00		Topical Lect. 1	Topical Lect. 1	Topical Lect. 1	Student Talks	Poster Session	Topical Lect. 1	Topical Lect. 1	Astrophysics/ Cosmology
11:00 - 11:30		Break	Break	Break	Break	Break	Break	Break	
11:30 - 12:30		Topical Lect. 1	Topical Lect. 1	Topical Lect. 1	Student Talks	Poster Session	Topical Lect. 1	Topical Lect. 1	Concl. Session Poster Award
12:30 - 14:00		Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
14:00 - 15:00		Neutrino Physics	Neutrino Physics	Neutrino Physics	Free	Student Talks	Invited Seminar		Departure
15:00 - 16:00		Topical Lect. 2	Topical Lect. 2	Topical Lect. 2	afternoon	Student Talks	Topical Lect. 2	Topical Lect. 2	
16:00 - 16:30	Arrival	Break	Break	Break	and/or	Break	Break	Break	
16:30 - 17:30		Topical Lect. 2	Topical Lect. 2	Topical Lect. 2	excursion	Student Talks	Topical Lect. 2	Topical Lect. 2	
17:30 - 18:30						Student Talks			
18:30 - 19:30		Discussion	Discussion	Discussion		Student Talks	Discussion	Discussion	
19:30 - 21:00	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner	





#### **Comments**

- Possible topical lectures for next summer
  - Model building, effective theories, ...
  - Accelerator Physics
- Ideas/proposals for special seminar/speaker very welcome
- Of course, comments in general very welcome

#### Next

- if you endorse this proposal, then
- I would start the organization
  - find location (there are some ideas)
  - look for money (there are some ideas, but others welcome.. :)
- help needed





### ■ Financial Issues:

- Hotel/meals :
  - paid by student, ie. Institute's travel budget
  - let's ask 3eme cycle and ETH/Universities (others?) for support/subsidy
- School infrastructure / coffee breaks
  - ~ 5000 SFR
  - should get support from Universities/ETHs
- Reimbursement for CHIPP-external speakers
  - travel, lodging, lectures
  - ~5000/speaker
- all together we should try to collect about 15-20k SFR to get serious...