

# CHIPP Outreach Report

A thick, horizontal yellow brushstroke with a textured, painterly appearance, extending across the width of the page below the title.

*28 January 2010*

*CHIPP Board*

*Zürich*

*HP Beck*

# CHIPP Outreach Group

- **CHIPP Outreach Group meets ~ twice a year**
  - **kick-off meeting was 19 August 2009 in Bern**
  - **next meeting: beginning of Spring semester (exact date by doodle)**
  
- The **primarily role** shall be **the coordination of outreach activities in Switzerland**
  - Outreach will normally be done by individual institutes
    - but should emphasize CHIPP and our common or related activities wherever this is sensible
  
  - **Benefit** from activities being done at one site to also be cloned at another site
    - good communication between Swiss groups → CHIPP Outreach Group
    - common web-site, mailing list, database of activities, exchange of material, brochures, etc.
  
- **Orchestrate** common (bigger scale, bigger money) outreach activities CHIPP wide
  - needs professional support (outsourcing activities to professionals)
  
- **Target Audience**
  - General Public
  - Schools
    - pupils
    - teachers
  - Universities
  - ...

- **EPPCN chair:** James Gillies  
(CERN, Head of Communication and CERN's spokesman)
- EPPCN Swiss delegate:** vacant  
(see next slides for details)
  
- **EPPOG co-chairs** David Barney (CERN, CMS)  
Michael Kobel (Dresden, ATLAS)
- EPPOG Swiss Delegate** Hanspeter Beck (Bern, ATLAS)
  
- Last EPPOG Meeting: 30-31 October @ CERN
  - <http://indico.cern.ch/conferenceDisplay.py?confId=69937>
  
  - **common session of EPPPOG with EPPCN** to better define relative roles of communication vs. outreach and to strengthen impact
  
  - special resources for media in preparation
    - Materials: Posters, postcards, template presentation
    - Web site: Resources for lecturers and public, schedule, videos

## *EPPCN Swiss Delegate*

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Beat Gerber (ETHZ) resigned from his post as Swiss delegate to EPPCN  
letter sent to CHIPP chair, CHIPP outreach coordinator on 4.11.2009

Successor being identified

communication expert with good network and ideas

needs some funds for travel

EPPCN meetings at CERN and once a year in a European city

Letter sent to the rector of Bern University end of 11 November 2009

Received positive feedback by 1 December 2009

Since then, few iterations and promised feedback by Uni Bern press  
office by next week

# Recent Outreach Activities

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- **A lot of Outreach** is being done throughout Switzerland
  - small scale, individual initiatives, all Swiss sites are active, no (or only little) coordination
  
- **Everybody (Be, Ge, ETHZ, EPFL, PSI, ZH) active in**
  - Visits to Experiment sites (ATLAS, CMS, LHCb, ...)
    - Schools, Journalists, VIPs
  - Open day events at local site
  - Student/Fresher days at local site
  - Public talks at schools, clubs (rotary, lions,...), industry, ...
  - Interviews @ TV / Radio / Printed press
  - Maturitätscommissionen

## ➤ Physics Masterclasses – EPPOG

### ➤ *International Masterclasses* *“Hands on Particle Physics”*

*12.2. 2010 (Zürich)*

*17.2.2019 (Bern)*

<http://www.physicsmasterclasses.org>

➤ **25** students intend to participate in Zürich

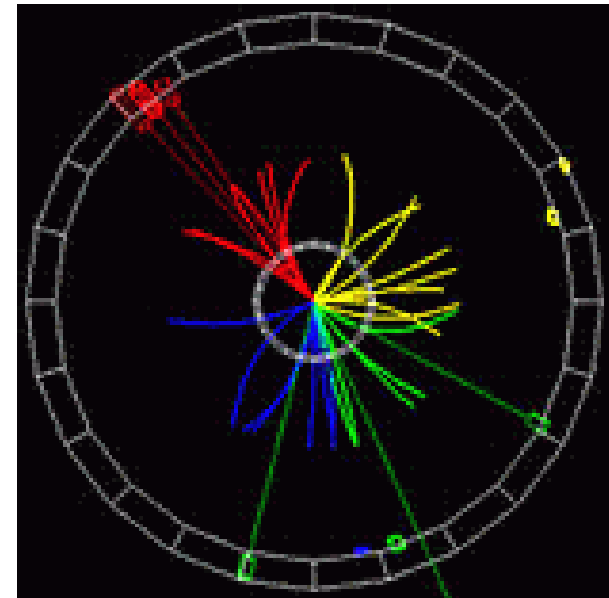
➤ **2** students! intend to participate in Bern

Problem with ski holidays?

In the canton of Bern, ski holidays are flexible during weeks 5-9.

Our ‘best supporting’ gymnasium finishes holidays by 12.2. → should be ok

teachers that have participated in the past were contacted again...



**23 Nations**

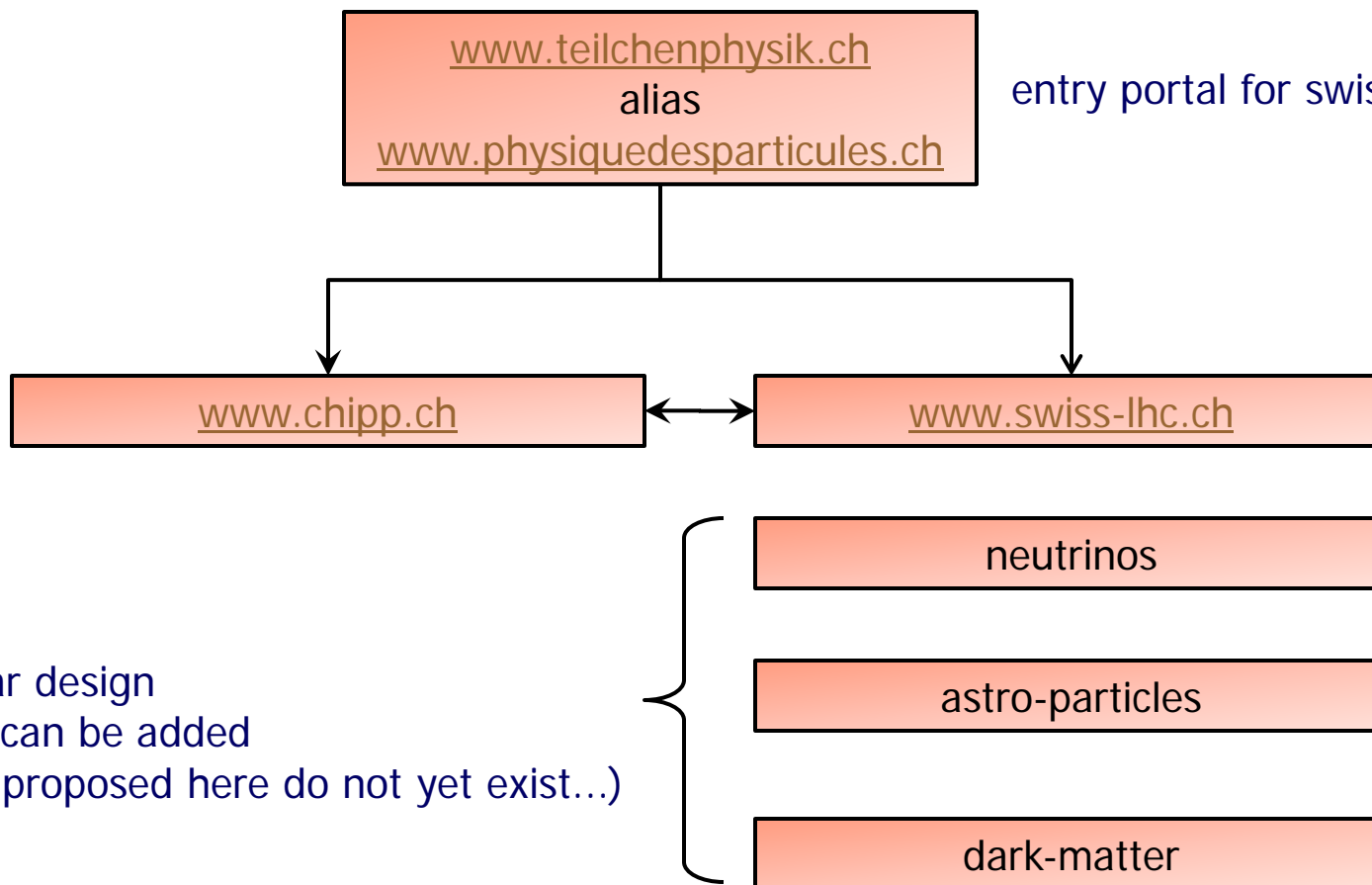
**~4800 students (~16-18 years old)**

**Switzerland: Bern & Zürich participated**

Geneva & Lausanne expressed interest to join for 2010 → did not receive feedback.

- **PH** (Pedagogical Highschool) organizes every year a series of teachers education programs.
  - **full day teachers session** – The Physics of Elementary Particles.
  - Zürich already active since few years
  - Bern scheduled for 11 September 2010
  
- In parallel want to use this contact to also convince Swiss teachers to participate at CERN teachers program
  
- <http://education.web.cern.ch/education/Chapter1/Intro.html>


# Swiss Web Sites



Modular design  
Topics can be added  
(these proposed here do not yet exist...)

work on web sites will resume with Bern communication office





**LHC**  
LARGE HADRON COLLIDER

**LHC Status:**  
Testphase QPS

Home
News (04.01.2010) >
LHC
Ziele
Beschleunigung >
Strahlkontrolle >
Beschleuniger Systeme >
Ringgeometrie >
Experimente >
Detektor Systeme >
Datenverarbeitung
Detektor Aufzeichnungen >
Gefahren und Risiken >
Technologietransfer
LHC Parameter
Geschichte >
Webcam >
LHC Online
Links
Kontakt

### Einleitung

Die Forschungsschwerpunkte der Teilchenphysik beschäftigen sich mit der Erforschung der grundlegenden physikalischen Gesetze, die über die elementaren Bausteine der Materie und der Struktur von Raum und Zeit herrschen. Die Inbetriebnahme des LHC, dem Large Hadron Collider, eines der grössten und globalen wissenschaftlichen Projekte aller Zeiten, markiert einen Wendepunkt in der Teilchenphysik. Proton-Proton und Blei-Ionen Zusammenstösse mit einer noch nie dagewesenen Energie, könnten in den kommenden Jahren ganz neue Einblicke eröffnen und möglicherweise einige der fundamentalen Fragen der modernen Physik beantworten, wie z.B. den Ursprung der Materie, die einheitliche Behandlung der fundamentalen Kräfte, neue Formen der Materie und zusätzliche Dimensionen von Raum und Zeit.

Zu Beginn des 20. Jahrhunderts waren die Wissenschaftler der Meinung, die meisten fundamentalen Prinzipien der Natur verstanden zu haben. Jedoch beginnend mit Einsteins Relativitätstheorie, welche die Newtonsche Mechanik ersetzte, wurde den Wissenschaftlern klar, dass ihr Wissen weit von jeglicher Vollständigkeit entfernt war. Das spezielle Interesse galt dem wachsenden Bereich der Quantenmechanik, die die Grundlagen der Physik vollständig veränderte.

Mit Beginn der ersten Kollisionsexperimente fand man heraus, dass Atome bei weitem nicht als elementare Bausteine der Natur verstanden werden konnten, sondern dass sie aus noch kleineren Bestandteilen bestehen. Ein ganzer Teilchen-Zoo wurde durch die Kollisionsphysik entdeckt. Die Gesetzmässigkeiten dieser Teilchen blieb den Physikern aber lange Zeit ein Rätsel.

[www.lhc-facts.ch](http://www.lhc-facts.ch) created by a „fan“

not a physicist but laboratory worker in chemistry (Chemielaborant )

lot's of information about the LHC project in German

no Swissness i.e. no Swiss institutes, participation, contribution mentioned

Several options to consider:

1) We do nothing

2) We buy the rights for these pages and beef them up  
i.e. make sure all is OK  
spelling & writing  
add Swissness  
and integrate it in Teilchenphysik.ch

3) We ask Adrian Schmitz (the LHC fan) to  
add Swissness  
i.e adding animated pages and videos  
section on CHIPP and link

would require some close collaboration especially in the  
starting phase

## CHIPP Outreach funding promised

### Strategic entry in CHIPP money table (150 kCHF/a)

#### 50 kCHF from SER

The project must be further (financially) supported by all involved Universities and institutes. - ok

The project should be for young people who are about to take the decision what to study (tbd)

Should be a global project targeted for young people.  
Preferably the project is long term (3 years)

### Direct contributions from CHIPP institutes

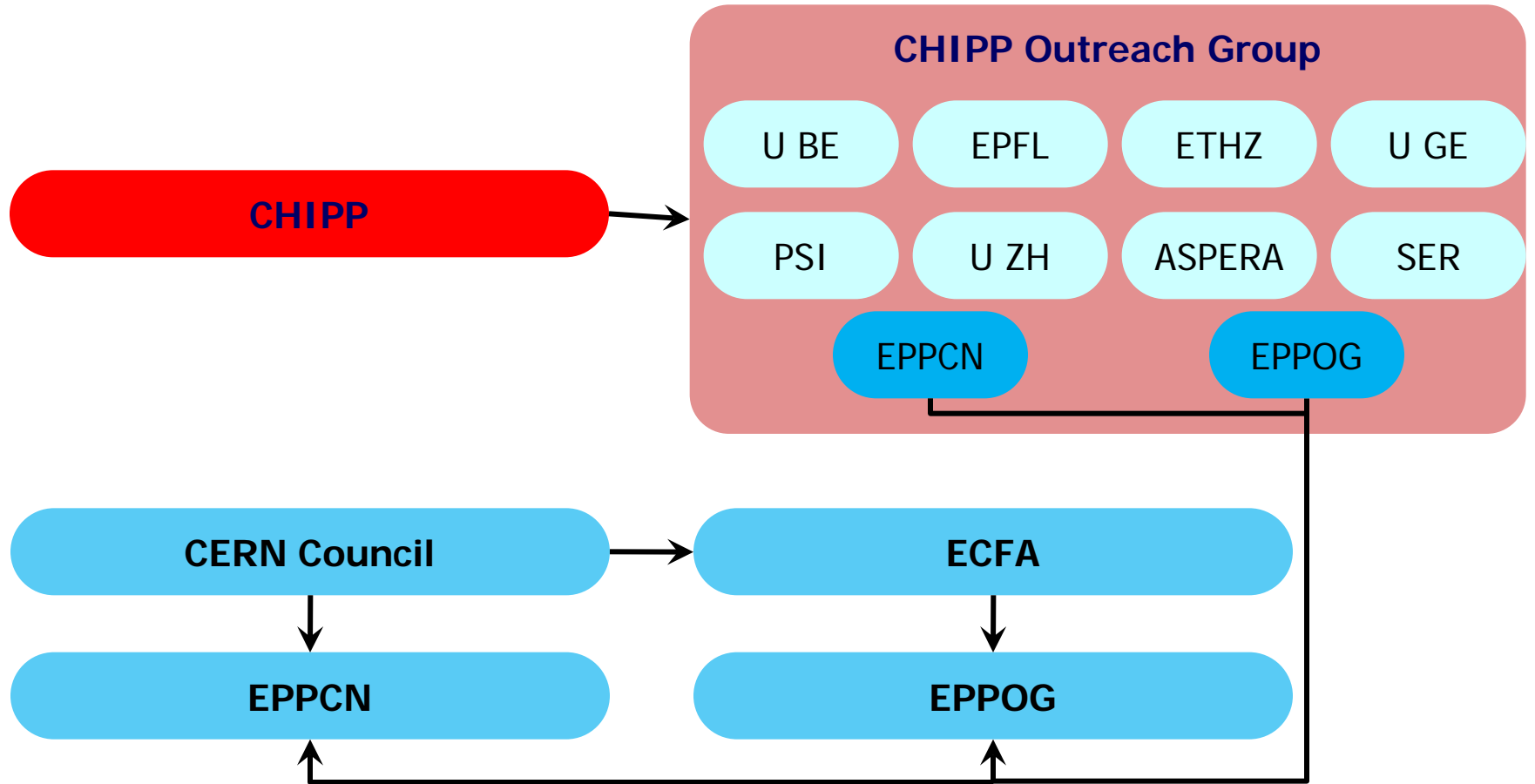
Not too bad as a starting position.

Beat Gerber did start planning a travelling exhibition (~50 kCHF).  
Will re-think together with CHIPP communication group and new communication person from Uni Bern press office.  
Can start work on the Swiss web.



# BackUp

# CHIPP Outreach Group



# CHIPP Outreach Group

One **delegate** (+one **alternate**) physicists from every CHIPP site  
 – alternate physicist to ensure better coverage of activities at each site  
 not (necessarily) required to participate in meetings

One **delegate** from **ASPERA, EPPCN, EPPOG & SER**

<u>Bern</u>	HP Beck (chair) & <u>EPPOG</u> Thomas Becher	contact alternate
<u>EPFL</u>	Frederic Blanc Aurelio Bay	contact alternate
<u>ETHZ</u>	Christoph Grab Marie-Christine Sawley	contact alternate
<u>Geneva</u>	Olivier Gaumer Bernard Révaz & <u>ASPERA</u>	contact alternate
<u>PSI</u>	Tilman Rohe Malte Hildebrand	contact alternate
<u>Zürich</u>	Angela Buechler-Gehrmann Teresa Marrodan-Undagoitia Vincenzo Chiochia	contact alternate
<u>SER</u>	Laurent Salzarulo	
<u>EPPCN</u>	vacant	

- EPPCN is a **network of closely cooperating professional communication officers from each Member State**, and reports on a regular basis to Council.
  
- The **EPPCN mandate**  
<https://espace.cern.ch/forum-EPPCN/Shared Documents/1207CouncilEPPCN-3.pdf>
  - Strengthen communication between communications officers in the Member States;
  - Review existing communications practices at CERN and in the Member States with a view to sharing best practice and maximising benefit in the Member States;
  - Offer constructive advice on communication issues to Council based on consensus decisions made by the network;
  - Prepare and implement communication activities based around the start-up and results from the LHC;
  - Propose, implement and monitor strategies designed to foster long-term support for sciences related to CERN's mission, in support of the European strategy for particle physics.

- In addition to EPPCN, there is the **European Particle Physics Outreach Group (EPPOG – <http://www.cern.ch/eppog>)**, reporting to ECFA, installed in 1997.
  
- **EPPOG** is a **network of physicists from Member States** who are active in physics education and outreach, and its purpose is to allow scientists to share best practise in outreach across borders.
  
- The **EPPOG mandate**
  - promotes the outreach activities of particle physics institutes and laboratories in the CERN Member States.
  - acts as a forum for the exchange of ideas and experiences related to particle physics outreach.
  - was formed under the joint auspices of the European Committee for Future Accelerators (**ECFA**) and the High Energy Particle Physics Board of the European Physical Society (**EPS-HEPP Board**).
  - is composed of
    - one member nominated by the particle physics community of each CERN Member State (normally the responsible person for outreach activities in the state concerned).
    - one member each from DESY and CERN, appointed by the managements of those laboratories.
    - additional representatives from particle physics experiments, astroparticle physics and non-Member States of CERN.



# Teachers education

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- CERN has a teachers program
- <http://education.web.cern.ch/education/Chapter1/Intro.html>
- The three-day **Physics Teachers Programme** is an international weekend course in English for teachers from all over Europe and includes seminars, visits and educational activities. Click [here](#) to find out more.
- The **High School Teacher Programme** is a comprehensive international course held in English, aimed at teachers who would like to spend the first three weeks of July at CERN. The next session will take place from 28 June - 18 July 2009. Click [here](#) to find out more.
- The **National Teacher Programmes** are held in the mother tongue language of the participants from CERN member states. Click [here](#) to find out more about their content, when the next session is planned for your country, to access the agenda, to find archived material of previous sessions and contact information.
- **Swiss teachers do not participate** (quote Rolf Landua, Head of CERN Education Group )  
→ we are changing this