

CHIPP Plenary meeting 2022



Agenda

1. Welcome, news from CHIPP Board and Executive Board

Michele Weber

2. CHIPP Elections

- **one Swiss Plenary-ECFA representative**
- **the ACCU Swiss representative**

3. Reports from CHIPP Committees

Michele Weber

CERN Council

ECFA

ACCU

APPEC

CHIPP Computing

CHIPP Outreach & Education

CHIPP/CHAPS

Gravitational Waves WG

ECT*

➡ **Agenda approved ?**

Minutes of the last meeting

- Minutes of the CHIPP Plenary 2021 have been made available on www.chipp.ch
 - [Link](#) [document](#)

NEW CHIPP

Executive Board composition

Ben Kilminster (Chair) 1st term until end 2024
Tobias Golling (Vice-Chair) 1st term until end 2023
Paolo Crivelli (Vice-Chair) 1st term until end 2024
Michael Spira (Vice-Chair) 1st term until end 2024

CHIPP Functions & Tasks elections

Gilberto Colangelo (UniBe)

Swiss representative for a 2nd term (Sep. 2022 – Sep 2024)

Katharina Müller (UZH)

CHIPP responsible for Education and Outreach for a 2nd term (Jan. 2023 – Dec. 2024)

Competences
of the Plenary
Session

Article 19

¹ The Plenary Session is the supreme body of the Association.

² In addition, the Plenary Session is a forum for scientific information, thereby providing annually an overview of the Swiss research and committee activities in particle, astroparticle and nuclear physics.

³ In particular, the Plenary Session

(...)

e. elects – on recommendation of the Board – the Swiss representatives to some of the international bodies;

f. decides – on recommendation of the Board – about the admission of Honorary Members.

CHIPP bylaws:

<https://chippfiles.scnat.ch/CHIPP/Documents/Statutes/StatutesBylaws.pdf>

Agenda item 2: Election of a new ECFA Plenary member

ECFA: European Committee for Future Accelerators

The election of the Swiss representatives in ECFA belongs to the CHIPP Plenary, based on a recommendation by the Board. (Article 19, litt. e)

- The present Swiss representatives in ECFA are:

Mike Seidel (PSI), Restricted ECFA and Plenary ECFA member until Dec 2021, 1st term

Frederic Blanc (EPFL), Plenary ECFA member until Dec 2021, 1st term

Domenico della Volpe (Uni. GE), Plenary ECFA member until Dec 2022, 2nd term

Philipp S. Wellenburg (PSI), Plenary ECFA member until Dec 2024, 1st term

The Board has nominated Annapaola de Cosa (ETHZ)



The Plenary is invited to elect Annapaola de Cosa (ETHZ)

for a 1st three-year term (Jan. 2023 – Dec. 2025) in the Plenary ECFA

Required majority: simple

Agenda item 2: *Election of the Swiss representative to ACCU*

ACCU: Advisory Committee of CERN Users

The election of the Swiss representatives in ACCU belongs to the CHIPP Plenary, based on a recommendation by the Board. (Article 19, litt. e)

Sergio Gonzalez Sevilla served in this function for the years 2021-2022, he is willing to stay in this function for the years 2023-2024

The Board has nominated Sergio Gonzales Sevilla (UniGE)

The Plenary is invited to elect Sergio Gonzalez Sevilla (UniGE) for a second two-year term from January 2023 to December 2024 as ACCU representative.



Required majority: simple

FCC workshop Part 2

Fostering Swiss collaboration towards a future circular collider - Part 2

25–26 Aug 2022

Europe/Zurich timezone



Overview

Timetable

These workshops aim to kickstart Swiss efforts to contribute towards a Future Circular Collider and to spearhead the collaboration among Swiss institutions on the development of detectors and accelerators. The first workshop covers the general aspects of the FCC project and introduces the activities and interests of the different Swiss groups. The goal of the second workshop is to identify interest for participation in concrete projects and collaborative activities with a focus on common fundraising efforts.

The workshops are sponsored and hosted by the Universities of Geneva and the University of Zurich. The workshops are endorsed by the Swiss Institute of Particle Physics (CHIPP).



University of
Zurich UZH



UNIVERSITÉ
DE GENÈVE



Swiss Institute of
Particle Physics



Starts 25 Aug 2022, 10:00
Ends 26 Aug 2022, 18:00
Europe/Zurich



University of Zurich



Anna Sfyría
Florencia Canelli



There are no materials yet.



Registrations will open soon: <https://indico.cern.ch/event/1041452/>

CHIPP Prize 2022

Gauillaume Pietrzyk (EPFL)

The CHIPP Prize jury honours Guillaume Pietrzyk for his experimental studies within the LHCb collaboration, which led to determine with unprecedented precision the rare phenomenon of particle-antiparticle oscillation in the neutral charm-meson system.

Award at the SPS/OPG joint Annual meeting : Tuesday 28 June at 11h00

Talk at the SPS/OPG joint Annual meeting Wednesday 29 June at 14h30

Agenda 3: Updates from the representatives in committees

CERN Council

ECFA

ACCU

APPEC

Gravitational Waves WG

CHIPP Computing

CHIPP Outreach & Education

CHIPP/CHAPS

ECT*

Asked to prepare 1 slide each as summary. Please ask questions if needed. More details in reports.

Agenda 3: Short Update from the CERN Council

Summary on ECFA activities, M.Seidel (PSI/EPFL)

major ongoing activities:

- **Detector R&D Roadmap Process** (CH contact B.Kilminster Uni ZH): formation of Detector R&D (DRD) collaborations; 6 technology areas and an additional similar structure for the transversal topics; community driven
- **Accelerator Roadmap Process** (LDG, D.Newbold, STFC) subgroups: High-Field Magnets (LTS, HTS), High-gradient acceleration (plasma / laser), high-gradient RF structures, muon beams, energy recovery linacs (ERL)
- **Early Career Researchers Panel:** <https://ecfa.web.cern.ch/ecfa-early-career-researchers-panel>; ECR CH: A.Fehr, S.Schramm, M.Zeyen
- **country visits:** are now fully recovered after first visit in France 2021, see table

upcoming events:

- Plenary ECFA meeting, **July 21-22**
<https://indico.cern.ch/event/1172215/>
- ECFA workshop e+e-, at **DESY October 5-7**, Hamburg:
<http://www.desy.de/ecfa2022>
- RECFA + PECFA meeting at **CERN, Nov 17 - 18**
- 2nd e+e- ECFA workshop **probably in Oct. 2023**

RECFA country visits 2022:

Italy	4 - 5 March 2022 ✓
Germany	1 -2 April 2022 ✓
Ukraine	13—14 May 2022
Denmark	12 - 13 May 2022 ✓
Hungary	23 - 24 Sept. 2022
Israel	3 - 4 Nov. 2022



Sergio Gonzalez Sevilla

■ COVID-19

- ▶ CERN is since 14th March 2022 on **Level-1 (green)** of COVID-19 scale
 - On-site access allowed to users
 - Mask nor proximeter no longer mandatory
- ▶ more info: <https://hse.cern/covid-19-information> and <https://hse.cern/content/scales-all>

■ Ukraine

- ▶ CERN Users' Office with [updated information](#) for users impacted by the war in Ukraine

■ Services

- ▶ Catering
 - all cafeterias are now open.
 - Improved Novae's [Click & Collect](#) service.
- ▶ Housing
 - Reservations start to increase again. ["Last minute" offer](#) still ongoing.
- ▶ Mobility
 - car-sharing reopening June 2022 🤖 ["Glide"](#) selected as car-sharing service partner
 - Shuttle service: circuit 4 (Meyrin - Airport) suspended until further notice due to low rentability for service contractor. Circuists 1-3 and 4 resumed.
 - Shared bikes, e-bikes and e-scooters service consolidating. More info [here](#).

- A very active year since the last report to CHIPP plenary (June 2022)
 - **4 Generally Assemblies: Oct. 13 2021, Nov. 30 2021, Mar. 7 2022, May 24 2022**
 - Suspends all cooperation with Russian institutions on Mar. 3 2022 following Russia's invasion of Ukraine
 - Admission of Ukraine in APPEC in next GA in July 2022
 - **2nd JENAS (Joint ECFA-NuPECC-APPEC Seminar): May 3-6 2022, Madrid**
 - Stimulating synergies across 3 communities
 - **Funding agencies meeting participated by Michele Weber as CH representative**
 - **APPEC town meeting: Jun. 9-10 2022, Berlin**
 - Review and discuss community feedback of the mid-term strategy report prepared by the APPEC SAC
 - https://www.appec.org/wp-content/uploads/2022/03/APPEC_Strategy_SAC_Midterm_Review_2022.pdf
 - Provide input for the European Astroparticle Physics Strategy 2022-2026 Update (draft ~September 2022)
 - Interactive format: participants rotating through round table discussions covering 14 topics
 - Laura Baudis chaired the Dark Matter discussion
 - See summary by Sijbrand de Jong (APPEC SAC chair) at <https://indico.desy.de/event/25372/>
- CH has important roles in many areas: DM, High energy γ -rays, ν properties, GW, cosmic rays, multimessenger, ..
 - **GW is a fast developing area; a good coordination with the astro community is becoming crucial. A short summary has been provided by Michele Maggiore and Philippe Jetzer and sent to the RoTIORI (Round Table Swiss Representation in International Organisations and Research Infrastructures) in Jan. 2022.**

Recent Gravitational Wave (GW) developments in Switzerland

- **Uni Genève:** formed a new intra-faculty **Gravitational Wave Science Centre (GWSC)**
 - Joint between astronomy, particle physics, and theoretical physics departments
- **Uni Zürich:** hiring a new professor in GW science data analysis (call closed Jan 30, 2022)
- **Press release** on Swiss involvement in GW science, links: **CHIPP**, **SCNAT**

- **Einstein Telescope (ET):** a next-generation ground-based GW observatory
 - **Official ESFRI project** as of June 2021; kickstarted many activities in the past year
 - **Approved** INFRA-DEV grant (3.45M€, 4 years) for setting up ET legal/project framework
 - UniGe is a major player in the computing model work package
 - **Submitted** INFRA-TECH grant (11.8M€, 4 years)
 - Joint multi-messenger technologies: CTAO and MAGIC, ET and Virgo, KM3NeT, and ELI
 - Key Swiss role in both CTAO+MAGIC (UniGe, EPFL) and ET (UniGe)
 - **Formal inauguration** of the ET Collaboration: June 7-8, 2022 in Budapest [[link](#)]
 - UniGe members hold multiple key roles within ET Collaboration, and were present in Budapest

ET Collaboration Formation: June 7-8 in Budapest



Collaboration Agreement renewal:

- Deadline 31.12.2022
- The structure of the draft follows very closely the previous one.
- together with CSCS we are in there process of drafting the new document
- we plan to renew the CA for two more years: 2023 - 2024

FLARE April 2023 - April 2024

- Deadline 15 November 2022
- draft by the Summer
- discussing with CHIPP-chair the possible budget we will be able to ask

EGI membership and FTE:

- 27.5 kCHF/year membership fees
- ~16 kCHF/year 10% FTE for EGI national operations
- SERI: FLARE cannot be used to cover this, but they rate the project as important
- Status:
 - Membership 2022 anticipated by EnhanceR
 - 10% FTE:
 - UBern has covered them until April 2022
 - CSCS is covering from April 2022 to April 2023
- C. Grab and M. Donegà participated at the EnhanceR May assembly:
 - Enhancer now willing to contribute to half of the associated EGI membership fee in 2023 and 2024, in addition to not asking for contributions for the already paid 2022 fee.
 - EnhanceR will terminate the associated EGI membership by 2022-12-31 with letter to EGI before 2022-09-30 (deadline for termination), unless CHIPP provides a contract committing the provision of half of the associated fee in 23 and 24, with the statement that EnhanceR will not take any responsibility for continuing the membership beyond 2024.
 - Of course, CHIPP or other user communities can engage in EnhanceR and find a sustainable solution by 2025. However, the current EnhanceR people will not invest any more active effort in the matter.

Remarks from CERN council meeting June 2022

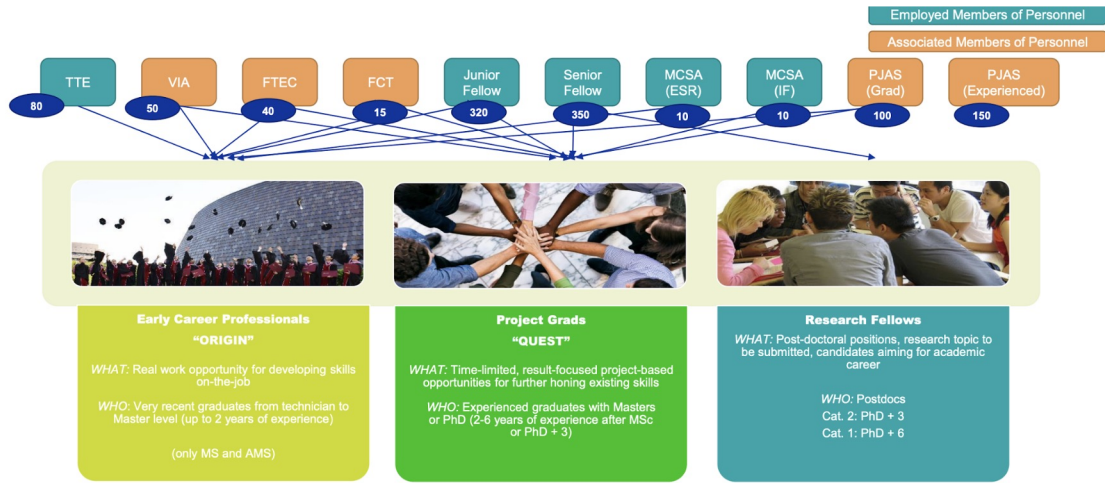
Florencia Canelli
CH council scientific delegate
University of Zurich

New CERN's graduate programs

Raphaël Bello – Council 16/06/2022

CERN/3647

3 new programs:



All three categories of graduates will be employed members of personnel, with competitive stipend, CERN Health Insurance & Pension Fund

Goals:

1. **Level playing field for Member State candidates & contributions**
2. Equitable treatment with coherent compensation & benefit package including • CERN stipends • CERN Pension Fund & Health Insurance • Installation etc.
3. Focus on early career development
4. Agile recruitment in search of excellence!

Timescale:



SCC: Standing Concertation Committee
 SCC – SG1: Sub-Group 1: Amendments to the Staff Rules and Regulations and the drafting of new or the revision of existing circulars

New CERN's graduate programs Switzerland 2021

In 2021, CERN had 23 Swiss national fellows.
All fellow types (research, but also engineers, IT technicians, administration, etc.)

The success rate of the Swiss applications for fellowships (all categories): 5.56% for an average of 9.69%

Table 28: Other Members of the Personnel by Nationality and Status – 31.12.2021

Nationality	Fellows		MPA (excl. Users and MPA training)		MPA training		Users		Grand Total	
	HC	%	HC	%	HC	%	HC	%	HC	%
AT	15	1.92	7	0.71	22	3.88	80	0.72	124	0.92
BE	9	1.15	7	0.71	4	0.71	91	0.81	111	0.82
BG	2	0.26	10	1.01	2	0.35	66	0.59	80	0.59
CH	23	2.94	25	2.53	30	5.29	196	1.75	274	2.03
CY	2	0.26	3	0.30	1	0.18	12	0.11	18	0.13
CZ	9	1.15	9	0.91	7	1.23	206	1.84	231	1.71
DE	61	7.79	93	9.40	53	9.35	1,048	9.38	1,255	9.29
DK	3	0.38	5	0.51	11	1.94	41	0.37	60	0.44
EE							13	0.12	13	0.10
ES	88	11.24	94	9.50	70	12.35	386	3.45	638	4.72
FI	8	1.02	9	0.91	4	0.71	67	0.60	88	0.65
FR	92	11.75	65	6.57	34	6.00	762	6.82	953	7.05
GB	48	6.13	54	5.46	15	2.65	645	5.77	762	5.64
GR	50	6.39	29	2.93	50	8.82	214	1.91	343	2.54
HR	6	0.77	2	0.20	4	0.71	39	0.35	51	0.38
HU	10	1.28	5	0.51	4	0.71	71	0.64	90	0.67
IL	2	0.26	6	0.61			54	0.48	62	0.46
IN	29	3.70	17	1.72	12	2.12	327	2.93	385	2.85
IT	106	13.54	211	21.33	110	19.40	1,798	16.09	2,225	16.46
LT	9	1.15	1	0.10			22	0.20	32	0.24
LV			2	0.20	3	0.53	13	0.12	18	0.13
NL	5	0.64	6	0.61	13	2.29	148	1.32	172	1.27
NO	14	1.79	7	0.71	12	2.12	49	0.44	82	0.61
PK	3	0.38	10	1.01	6	1.06	52	0.47	71	0.53
PL	52	6.64	49	4.95	41	7.23	298	2.67	440	3.26
PT	38	4.85	50	5.06	20	3.53	98	0.88	206	1.52
RO	17	2.17	5	0.51	7	1.23	134	1.20	163	1.21
RS	11	1.40	5	0.51	3	0.53	46	0.41	65	0.48
SE	8	1.02	9	0.91	4	0.71	56	0.50	77	0.57
SI	1	0.13	4	0.40	2	0.35	32	0.29	39	0.29
SK	9	1.15	3	0.30	3	0.53	115	1.03	130	0.96
TR	6	0.77	4	0.40	6	1.06	156	1.40	172	1.27
UA	9	1.15	3	0.30	6	1.06	81	0.72	99	0.73
NMS	38	4.85	180	18.20	8	1.41	3,759	33.64	3,985	29.49
Total	783	100.00	989	100.00	567	100.00	11,175	100.00	13,514	100.00
%	5.79		7.32		4.20		82.69		100.00	

Table 47: Fellow Applicants by Application Status, Nationality and Gender in 2021

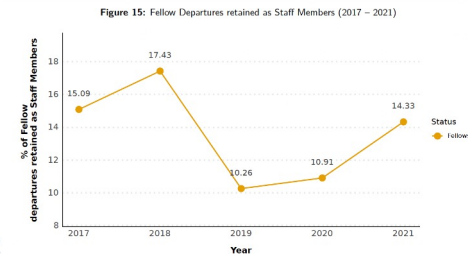
Nationality	Applied *			Selected **			Refused Offer			Indicative Success Rate ***	
	F	M	Total	F	M	Total	F	M	Total	%	%
AT	7	12	19	1	4	5					26.32
BE	9	29	38	1	4	5					13.16
BG	8	14	22	1	1	2					9.09
CH	55	107	162	2	7	9					5.56
CY	1	9	10			3					30.00
CZ	6	18	24		5	5		1	1		20.83
DE	36	83	119	8	21	29	1	1			24.37
DK	3	10	13	1	3	4					30.77
EE	4	1	5								0.00
ES	76	208	284	16	30	46	1	2	3		16.20
FI	9	8	17	3	2	5					29.41
FR	118	247	365	11	33	44	1	1			12.05
GB	86	221	307	10	18	28	2	2			9.12
GR	76	146	222	6	17	23	3	3			10.36
HR	4	6	10								0.00
HU	4	11	15	3	3	6					40.00
IL	3	8	11	1	1	2					18.18
IN	162	369	531	3	10	13	1		1		2.45
IT	109	280	389	17	37	54	1	4	5		13.88
LT	6	11	17	2		2	1		1		11.76
LV	1	1	2								0.00
NL	15	15	30		2	2	1		1		6.67
NO	7	19	26	1	7	8					30.77
PK	140	561	701	1	1	2					0.29
PL	40	72	112	4	21	25	1	2	3		22.32
PT	31	77	108	3	15	18	1	1			16.67
RO	17	27	44	2	4	6					13.64
RS	8	7	15	1	1	2					13.33
SE	4	26	30	2	5	7	1	1			23.33
SI	2	3	5	2		2					40.00
SK	7	17	24	1	5	6					25.00
TR	36	65	101	1	1	2					1.98
UA	15	8	23	1	1	2					8.70
NMS	38	91	129	1	13	14					10.85
Total	1,143	2,787	3,930	106	275	381	6	18	24		9.69

* Includes applications considered as 'eligible' according to the criteria of the programme.

** Includes Fellows selected to replace those who refused a CERN fellowship.

*** Data shows all statuses (Applied, Selected, Refused Offer) of a given applicant throughout the year. As student and fellow committees are held twice per year, it can be that an applicant shows as 'Applied' in year n-1, but as 'Selected' in year n and therefore number of 'Selected' may on occasion be superior to number of 'Applied'.

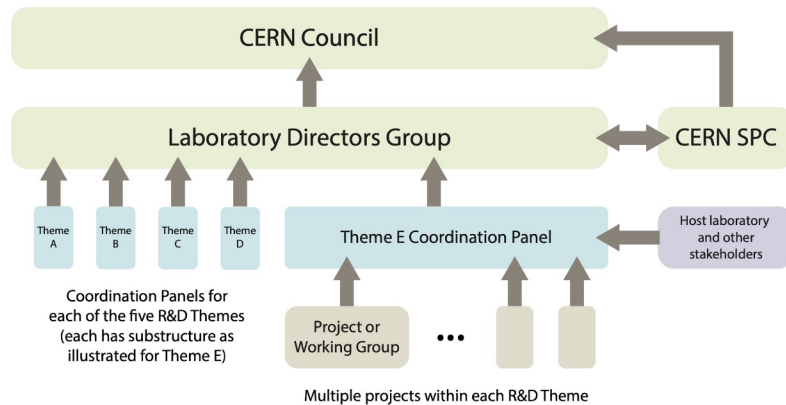
Proportion of fellows retained as staff in 2021 is 14.33%



Data from : <https://cds.cern.ch/collection/CERN%20Annual%20Personnel%20Statistics?ln=fr>,

Implementation plans for accelerator R&D roadmap

Dave Newbold– Council 17/06/2022



▸ Informal discussions with several funding agencies

- Gain a first impression of interests, commitments, plans
- Understand requirements for governance structure and reporting
- *All* funding agencies are invited to express their views to LDG
 - Even in the case where there are no immediate plans for participation in the programme

▸ LDG now requests nominations for panel leadership

- From funding agencies, conveyed directly or via national laboratory contacts
 - Where a formal collaboration exists, anticipate that the host laboratory will nominate LDG link persons
- Panel leaders should have good awareness of the international field, sufficient technical expertise, and sufficient availability over the next few years
- Discussions in national communities indicate that there are qualified candidates prepared to accept nominations, in all Themes
- Nominations requested before next LDG discussions on the 7th July

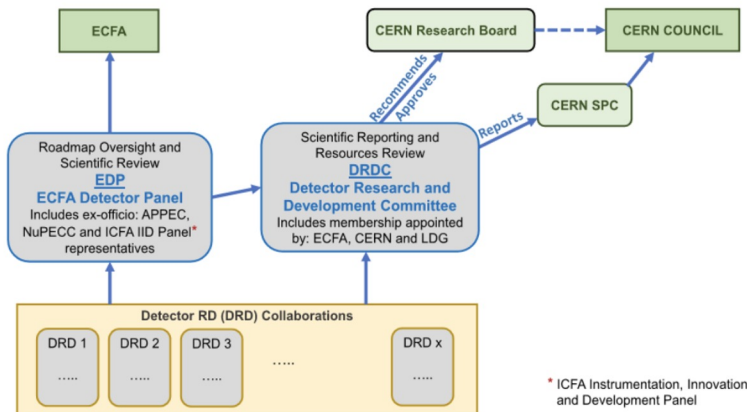
▸ Completion of matrix of interest by funding agencies

- Documenting existing and future areas of interest, without commitment
- This information will form the initial basis for convening the panels
 - Ensuring that all interested parties are aware of discussions and able to participate
- No request for resource information yet: this is an initial task of the panel chairs

Presentation 28 April 2022

Feedback welcome

Interim report in preparation for Sept Council meeting



1. ECFA Detector Panel (EDP): the scope, R&D goals, and milestones should be vetted against the vision encapsulated in the Roadmap. (EDP: <http://cds.cern.ch/record/2211641/files/>, exists, hosted at DESY)
2. The resources for detector R&D should be reviewed by an independent body, the Detector Research and Development Committee (DRDC) → recommendations, final approval would lie with the CERN Research Board.
3. Funding Agency involvement via a dedicated Resources Review Board (~once every two years)
4. Yearly follow-up by EDP/DRDC → report to SPC → Council

Presentation 28 April 2022

Feedback welcome

Interim report in preparation for Sept Council meeting

- Discussions with Funding Agencies have taken place

Support for the plan to set up structured, long-term Detector R&D activities;
No major objections raised

- Details of transition from RD51, RD50 into DRD1/DRD3 under discussion

Aim to present a final plan at the September 2022 SPC and Council meetings

- Strong support from technology areas where no R&D collaborations exist at present (TF2, TF5, TF6, TF7, TF8)

CHIPP – short outreach report

2021/22 still challenging for outreach events:

- Masterclasses – at BERN, EPFL and Zurich
- High-School Students Internship Program, HSSIP – Oct 17-30 (video)
- Activities for high-school students: ongoing at UZH (Science Lab, well attended)
- PSI has restarted normal visiting program

New paths and tools to attract different people and wider audiences:

- Virtual visits, online events, virtual talks, videos, ...

Some great achievements in the past months

- Science Pavilion UZH: exhibit space with temporary exhibitions, well attended guided tours (LHC & Dark Matter)
- Scientifica '21: Zurich Science Days September 8./9: tours to Xenoscope, lectures, booth (LHC and Dark Matter) theatre on black holes: good attendance despite Covid restrictions
- Nacht der Physik (ETH), lectures, experiments, lab tours, booths

Ongoing

- Regular CHIPP news articles by Benedict Vogel & Barbara Warmbein (since '22)
- Women and girls in science, February 11: tweets and special programs for girls in science
- Talks, (virtual) visits, some (virtual) courses, mentoring

Outlook

- Restart LHC | Higgs@10 | open days at PSI | Scientifica '23

for extended report, see CHIPP agenda ideas/suggestions?
→ Katharina (kmueller@physik.uzh.ch)

- CHAPS is being reactivated
 - Philippe Jetzer (UZH) is new interim president of CHAPS
- Home page part of SCFA: <https://scfa.scnat.ch/de>
- Recent activities
 - [Swiss Astronomy Roadmap 2025 – 2028](#) completed
 - CHAPS was asked to provide FLARE budget plan for next funding round
- CHAPS structure
 - [SSAA/SGAA](#) corresponds to CHIPP
 - CHAPS (tenured astronomy professors) ~ CHIPP Board
 - SCFA (Swiss Commission for Astronomy) ~ CHIPP Executive Board

Postponed to August 2022

<https://indico.psi.ch/event/8227/>

Zuoz Summer School 8-14 August 2021



Vision and Precision

<https://www.psi.ch/particle-zuoz-school>

Registration will open in March 2021
before June: **CHF 650**; later : **CHF 730**

Adrian Signer, Michael Spira, Anita van Loon-Govaerts, zuoz2021@psi.ch

Nicolas Berger (Annecy)

Statistics

Brian Petersen (CERN)

From raw data to physics

Vincenzo Cirigliano (Los Alamos)

EFT and low-energy probes of new physics

Barbara Jäger (Tübingen)

Perturbative (QCD) calculations

Angela Papa (Pisa/PSI)

Low-energy experiments

Renato Renner (ETH)

Foundations of quantum mechanics

Andrea Wolz (CERN/EPFL)

The big questions

All inclusive fee

(meals, lodging, coffee breaks,
excursion, conference dinner,
tennis and football)