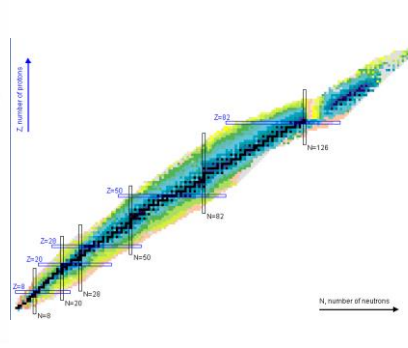
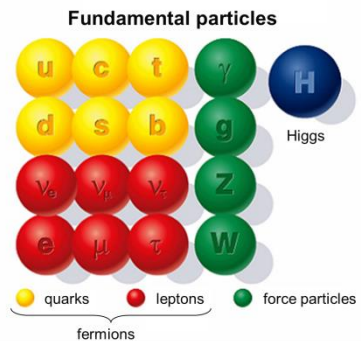
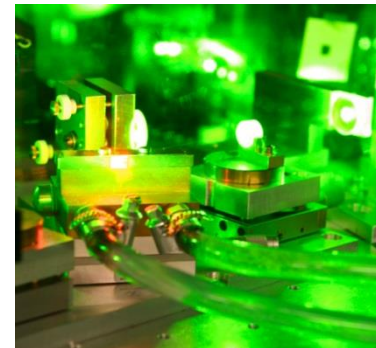
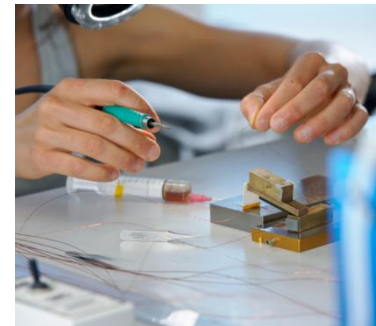
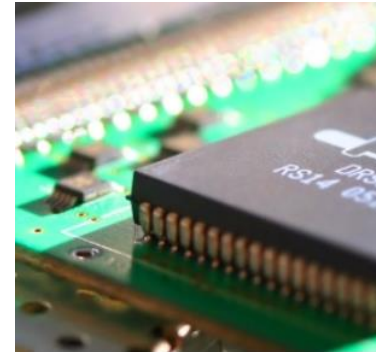


CHIPP Roadmap on the future of Swiss particle physics (Outcome of Fribourg workshop)

LTP seminar, 24.9.2018

K.Kirch

$$\mathcal{L} = -\frac{1}{4} F_{\mu\nu} F^{\mu\nu} + i\bar{\psi}\not{D}\psi$$





> [Swiss Institute of Particle Physics](#) > [Home](#)

Swiss Institute of Particle Physics (CHIPP)

CHIPP, the Swiss Institute of Particle Physics, is an association uniting researchers active in particle, astroparticle and nuclear physics in Switzerland. The objectives of CHIPP are to coordinate and strengthen the Swiss participation in international projects and committees, coordinate research and teaching activities in Switzerland, and promote public awareness of the field.

This is achieved by keeping a continuous dialogue between the particle physicists of different cantonal universities and federal institutes. CHIPP is recognized as the representative of Swiss particle physics both nationally and internationally. It awards yearly a Prize to a PhD student, supports workshops and conferences, organises PhD schools, and develops outreach projects.

Particle physics news

[more](#)

CHIPP infos



[Board meetings](#)



[CHIPP organisation](#)



20.09.2018 10:00

Search in organisation:

Show

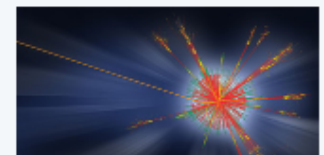
Contact

CHIPP
c/o Prof. Dr. Tatsuya Nakada
EPFL SB IPHYS LPHE3
BSP 615 (Cubotron UNIL)
Rte de la Sorge
1015 Lausanne

+41 21 693 04 75

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Outreach



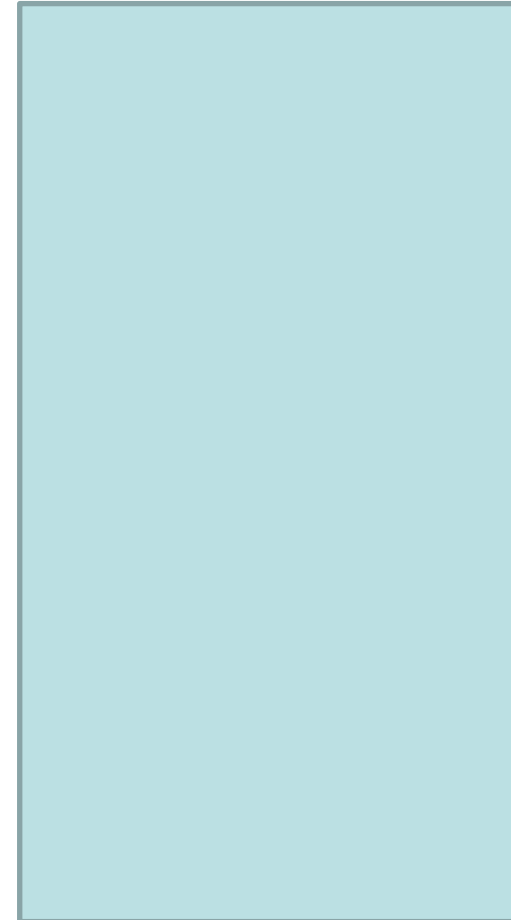
Swiss Particle Physics Roadmap

■ https://naturwissenschaften.ch/organisations/chipp/meetings_documentation

■ 2004

2011

→ 2020



European Strategy

At its Restricted Session on 28 September 2017, the Council thus appointed Professor Halina Abramowicz as Strategy Secretary and established the Strategy Secretariat as follows:

- Professor H. Abramowicz (Strategy Secretary and Chair),
- Professor K. Ellis (SPC Chair),
- the incoming ECFA Chair (to be appointed by Plenary ECFA on 16 November) and
- Professor L. Rivkin (Chair of the European Laboratory Directors group).

At its meeting at CERN on 16 November 2017, Plenary ECFA appointed Professor J. D'Hondt as its Chair, thereby completing the composition of the Strategy Secretariat.

- December 2018: (middle) Deadline for the submission to the PPG of written scientific input for proposals to be discussed in the Open Symposium.
- Beginning of 2019: First formal meeting of the ESG.
- May 2019: (2nd half) A four-day Open Symposium (exact dates and venue to be determined) for the whole community to discuss the scientific input to the work of the ESG (Briefing Book).
- September 2019: (end) Briefing Book compiled by the Physics Preparatory Group (PPG) submitted to the ESG as input for the Strategy Drafting Session.
- January 2020: (2nd half) Strategy Drafting Session of the European Strategy Group (ESG) lasting one week (Monday to Friday, exact dates and venue to be determined)
- March 2020: submission of the draft Strategy update to the Council for feedback.
- May 2020: approval of the updated European Strategy for Particle Physics by the Council at a special Open Session coinciding, ideally, with a meeting of the EU Competitiveness Council (date and venue to be determined).

IV. Amendment to the composition of the PPG

Pursuant to the revised procedural framework for the European Strategy for Particle Physics adopted by the Council in December 2013 ([CERN/3092/RA](#)), the composition of the PPG is as follows:

- the Strategy Secretary (acting as Chair),
- four members appointed by the Council on the recommendation of the SPC,
- four members appointed by the Council on the recommendation of ECFA,
- the SPC Chair,
- the ECFA Chair,
- the Chair of the European Laboratory Directors' meeting,
- one representative appointed by CERN,
- one representative from Asia appointed by the respective regional representatives in ICFA,
- one representative from the Americas appointed by the respective regional representatives in ICFA.

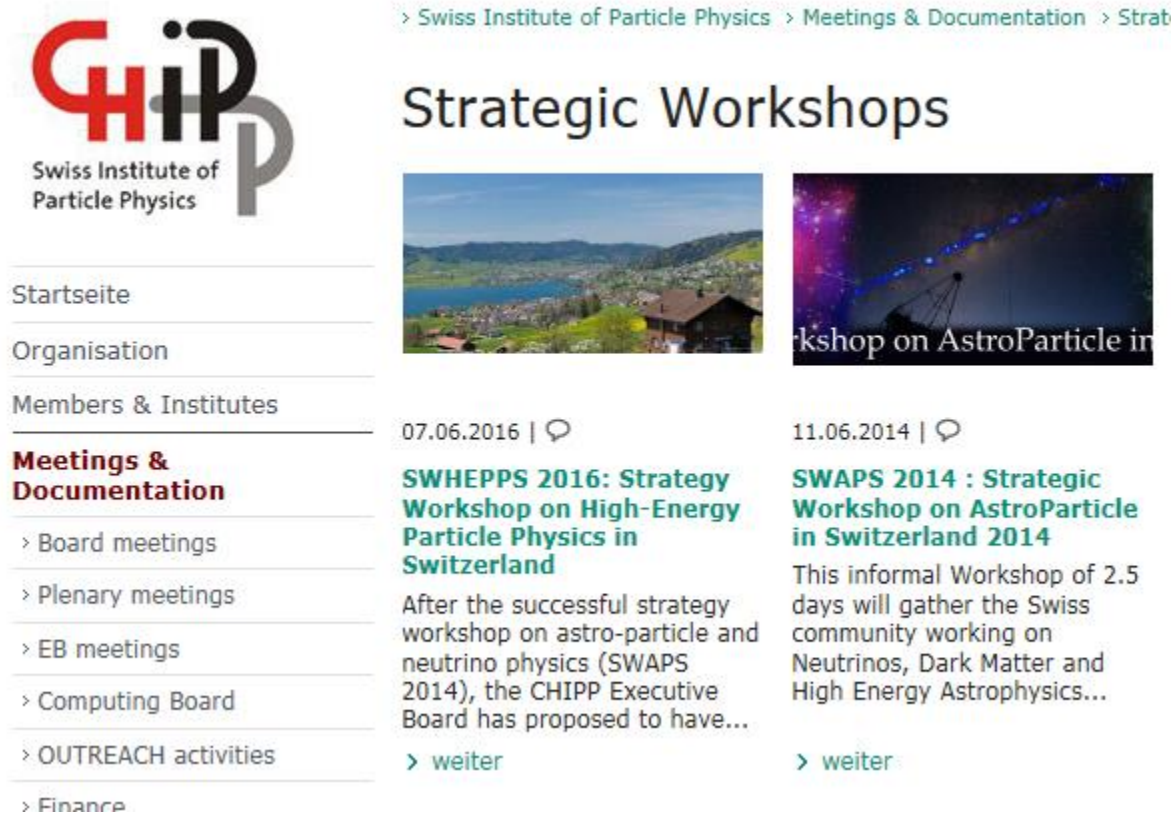
In view of the increasing number of countries in Asia and the Americas that are assuming important roles in shaping the global scientific particle physics programme, the Strategy Secretariat proposes to increase the respective number of representatives on the PPG from one to two from each region.

European Strategy for Particle Physics Update 2018 - 2020

- <https://council.web.cern.ch/en/content/european-strategy-particle-physics-update-2018-2020>
- Written community input before Dec 18, 2018
- The Open Symposium
Granada, Spain (13-16 May 2019)
- The Strategy Drafting Session
Bad Honnef, Germany (20-24 January 2020)
- New strategy published (May 2020)

CHIPP

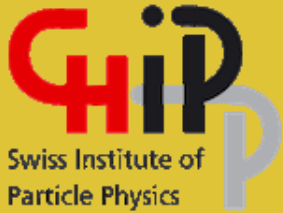
- 3 pillars: High energy (incl. low energy precision), astroparticle, neutrino



The screenshot shows the CHIPP website. On the left is a navigation menu with the following items: Startseite, Organisation, Members & Institutes, Meetings & Documentation (highlighted in red), Board meetings, Plenary meetings, EB meetings, Computing Board, OUTREACH activities, and Finance. The main content area is titled 'Strategic Workshops' and features two workshop entries. The first entry is for 'SWHEPPS 2016: Strategy Workshop on High-Energy Particle Physics in Switzerland' dated 07.06.2016, with a description: 'After the successful strategy workshop on astro-particle and neutrino physics (SWAPS 2014), the CHIPP Executive Board has proposed to have...'. The second entry is for 'SWAPS 2014 : Strategic Workshop on AstroParticle in Switzerland 2014' dated 11.06.2014, with a description: 'This informal Workshop of 2.5 days will gather the Swiss community working on Neutrinos, Dark Matter and High Energy Astrophysics...'. Both entries include a 'weiter' link. The website header includes the breadcrumb: '> Swiss Institute of Particle Physics > Meetings & Documentation > Strat'.

SWICH-1

■ <https://indico.cern.ch/event/687183/>



SWICH April 2018

3-6 April 2018

Schweizerische Bundesbahnen SBB Centre Loewenberg

Europe/Zurich timezone

Search...

Overview

Timetable

Contribution List

Speaker List

Registration

Participant List

How to come to Centre
Loewenberg

CHIPP is planning an update of the Swiss roadmap on particle physics. This will serve as a basis for the Swiss input for the update of the European Strategy for Particle Physics, which is the European-wide discussion to take place in 2019. Strategic Workshop in Switzerland (SWICH) is the first of the two workshops to prepare the Swiss roadmap update, it is open to all CHIPP members having interest to contribute to the discussion.

PLEASE REGISTER BEFORE THE 14th MARCH 2018

Registration extended to the 19th MARCH !



Starts 3 Apr 2018, 10:00

Ends 6 Apr 2018, 20:00

Europe/Zurich



Schweizerische Bundesbahnen SBB Centre
Loewenberg

CH-3289 Murten



Michele Weber

Tatsuya Nakada



Accommodations for families

[Broschüre MT, FerienWohnungen.pdf](#)

Angela Benelli

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Angela.benelli@chipp.ch

Pillar White papers



WHITE PAPERS

Draft of the CHIPP White Papers for Pillar 1 endorsed by the EB (27 March 2018) : [document](#)

Strategy for Swiss contributions to large ground-based astro-particle physics research infrastructure (17 Mar. 2013) [document](#)

Experimental neutrino physics: Switzerland in the global context, a white paper (14 Nov. 2015) [document](#)

CHIPP Pillar 1 Whitepaper 2018:

Input to the Strategic Workshops in Switzerland



DRAFT PRESENTED TO THE
SECOND SWICH WORKSHOP 13-14 SEPTEMBER 2018

September 8, 2018

SWICH-2

■ <https://indico.cern.ch/event/733021/overview>



CHIPP
Swiss Institute of
Particle Physics

SWICH2 September 2018

13-14 September 2018
Au Parc Hotel, Fribourg

- Overview
- Timetable
- Contribution List
- Speaker List
- Registration
- Participant List
- How to come to the "Au Parc Hotel"
- Input documents

Angela Benelli
✉ angela.benelli@cern.ch

CHIPP is planning an update of the Swiss roadmap on particle physics. This will serve as a basis for the Swiss input for the update of the European Strategy for Particle Physics, which is the European-wide discussion to take place in 2019. Strategic Workshop in Switzerland (SWICH2) is the second of the two workshops to prepare the Swiss roadmap update, it is open to all CHIPP Board members having interest to contribute to the discussion.

The [first SWICH](#) workshop was in Murten the 3-6 April 2018.





At the side: FLARE and FLARE tables

FLARE Request 2019-2020	Pillar	Project	2017	2018	2019	2020	2021	2022	2023	2024	FLARE Request 2021-2024	2016				TOTAL	fraction
												Professors	Senior	Postdoc	PhD		
	pillar 1 High energy	ATLAS	984	1'311	1'605	1'557	1'740	1'755	1'740	540	5'775	5.45	3.3	14.4	15.2	38.35	0.01
2'300	pillar 1 High energy	CMS	983	983	1'150	1'150	1'150	1'150	1'150	1'150	4'600	5.35	12	21.5	24.5	63.35	0.02
	pillar 1 High energy	LHCb	656	613	773	293	520	520	520	520	2'060	3.85	5.2	15.2	20	44.25	0.04
	pillar 1 High energy	M&O LHC experiment	915	915	938	937	834	834	834	34	2'536	0	0	0	0	0	
1'775	pillar 1 High energy	LHC Computing Tier-2	820	836	863	913	913	913	913	913	3'651	0	0	0	0	0	0.00
0	pillar 1 High energy	HL-LHC	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0.2	0.00
0	pillar 1 High energy	CLIC	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0.2	0.00
0	pillar 1 High energy	SHIP	0	0	0	0	0	0	250	250	500	1.05	0	4	2.7	7.75	0.03
500	pillar 1 Low energy	Mu3e	0	0	250	250	250	250	250	250	1'000	0.55	1.6	1.5	3.1	6.75	0.11
0	pillar 1 Low energy	GBAR	180	73	0	0	0	0	0	0	0	0	0.6	0.3	1	1.9	0.03
740	pillar 1 Low energy	nEDM	NEDM		370	370	220	170	50	50	490	1	5.5	2.5	7	16	0.32
165	pillar 1 Low energy	NA64	0	0	0	165	165	15	15	15	210	0	0.6	0.3	1	1.9	0.04
	Pillar 1 TOTAL Granted		4'537	4'731	3'316	2'787											
5'480	Pillar 1 TOTAL Requested				2'633	2'848	5'792	5'607	5'722	3'722	20'842						
700	Pillar 2 Neutrino	GERDA	116	116	350	350	350	350	350	350	1'400	0.3	0.3	1.3	3	4.9	0.04
180	Pillar 2 Neutrino	SBN	261	421	90	90	0	0	0	0	0	1	0.5	2.5	3	7	0.04
1'450	Pillar 2 Neutrino	NA61/T2K/NP05/HyperK	200	45	805	645	75	1'000	1'000	1'000	3'075	1.05	1.8	6	7.5	16.35	0.03
900	Pillar 2 Neutrino	DUNE ND	0	0	600	300	1'000	0	0	0	1'000	0	0	0	0	0	
600	Pillar 2 Neutrino	WA105 + DUNE-SPT	621	628	300	300	200	0	0	0	200	0.7	3	5	2	10.7	0.03
	Pillar 2 TOTAL Granted		1'398	1'210													
3'830	Pillar 2 TOTAL Requested				2'145	1'685	1'625	1'350	1'350	1'350	5'675						
0	Pillar 3 Astroparticle	CTA	0	0	0	0	0	0	0	0	0	1.3	4.3	5.8	4.5	15.9	0.01
200	Pillar 3 Astroparticle	DAMIC	0	0	100	100	100	100	100	0	300	0.2	0.2	0.5	0	0.9	0.03
480	Pillar 3 Astroparticle	XENON	378	378	240	240	0	0	0	0	0	1.1	1	4	3	9.1	0.07
1'300	Pillar 3 Astroparticle	DARWIN	0	0	650	650	430	430	430	430	1'720	0.6	7	5	8.5	21.1	0.15
0	Pillar 3 Astroparticle	ArDM	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0.2	
0	Pillar 3 Astroparticle	HERD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	Pillar 3 Astroparticle	IceCube	0	0	0	0	0	0	50	100	150	0.3	0	0.25	1.75	2.3	0.01
	Pillar 3 TOTAL Granted		378	378													
1'980	Pillar 3 TOTAL Requested				990	990	530	530	580	530	2'170						
	TOTAL Granted		6'313	6'318	3'316	2'787											
	TOTAL Requested				5'768	5'523	7'947	7'487	7'652	5'602							
11'290											28'687						
	FLARE budget still available				10'322			Astro=	2943.8								
	FLARE already granted 2017-2020				18'734												
	FLARE requests 2019-2020				11'290												

Update in progress by CHIPP

11:00	Neutrino program in the USA	Antonio Ereditato	Discussion on Pillar 1 WP Draft	Paralel session: Pillar 3		
	Discussion					
	Saphir	11:15 - 11:30				
	Neutrino program in Japan	Federico Sanchez				
12:00	Discussion		Discussion on Pillar 1 Input to Plenary	Paralel session: Pillar 3		
	Saphir	11:45 - 12:00				
	Neutrinoless Double-Beta Decay	Laura Baudis			Emeraude	11:00 - 12:30
	Discussion					
Saphir	12:15 - 12:30	Emeraude	12:30 - 13:00			
Atmospheric and Astroparticle neutrinos				Jade	11:00 - 13:00	
Discussion						
Saphir	12:45 - 13:00					

Opening remarks	<i>Haefliger Gregor</i>
<i>Au Parc Hotel, Fribourg</i>	14:05 - 14:20
Pilar1 discussion summary	<i>Rainer Wallny</i> 
<i>Au Parc Hotel, Fribourg</i>	14:20 - 14:50
Plenary discussion	<i>Tatsuya Nakada</i>
<i>Au Parc Hotel, Fribourg</i>	14:50 - 16:30
COFFEE BREAK	
<i>Au Parc Hotel, Fribourg</i>	16:30 - 17:00
Pilar 2 discussion summary	<i>Michele Weber</i> 
<i>Au Parc Hotel, Fribourg</i>	17:00 - 17:30
Plenary discussion	<i>Tatsuya Nakada</i>
Pilar 3 discussion summary	<i>Ruth Durrer</i>
<i>Au Parc Hotel, Fribourg</i>	09:00 - 09:30
Plenary discussion	<i>Tatsuya Nakada</i>

Next steps

- Produce CH-input to EuropStrat by middle of December (1st version by Board meeting October? Circulation in Nov?)
- Start drafting CH roadmap in summer 2019
- Finalize CH roadmap in July 2020 just after the publication of the European Strategy