

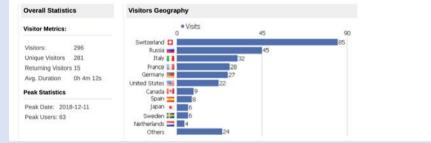


Input – status report

Total number of submissions (13/12/2018 at 20:00)

	#	Contact	Title			
1	1	Robert Shrock	Searches for Sterile Neutrinos at CERN: Contribution to European St	rategy for Particle Physics		
2	2	Philip Yock	Newtonian Test of the Standard Model			
3	3	Roy Aleksan	TIARA contribution to the European Strategy of Particle Physics			
4	5	Maurizio Pierini	A European Data Science Institute for Fundamental Physics			
5	6	Mieczyslaw Krasny	Gamma Factory for CERN			
6	7	Brigitte Cros	Advanced LinEar collider study GROup (ALEGRO) Input			
7	8	Francois Richard	DM follies and the 'Krisis' of particle physics			
8	9	Sergei Gninenko	Prospects for exploring the Dark Sector physics and rare processes	Visitor Hit Rates Info		
9	10	Abdel Nasser Tawfik	Implication of results on transport and viscous properties of QGP c	90 80 Total Hits		
10	11	Bostjan Golob	The Belle II experiment at SuperKEKB: input to the European Partic	70 Unique Hits		
11	12	Andrei Golutvin	The SHiP experiment at the SPS Beam Dump Facility"	60 -		
12	13	Marek Gazdzicki	Proposal from the NA61/SHINE Collaboration for the update of the	50		
13	14	Anatoly Petrukhin	Complex NEVOD for multi-component investigations of cosmic ray	40 -		
				20		





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Calendar (Physics Preparatory Group)

- Input submission will be closed at 23:59 CET December 18th 2018
- January 9th 2019 PPG vidyo meeting to review/assign to thematic groups the submitted inputs
- Around January 10th 2019 open access to European Strategy Group
- Around mid-January 2019 open access to public
- January 21st 2019 PPG meeting at CERN to finalize the programme for the Open Symposium, including invited speakers/experts; decide on follow-up vidyo meetings
- May 12th 2019 PPG meeting in Granada, before the Symposium
- May 17th 2019 PPG debriefing meeting in Granada, right after the Symposium
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- > ECFA/EPS-HEPP meeting July 13th 2019 in Ghent
- > Deliver Briefing Book for September 2019



Preparations of the Open Symposium

<u>Web page for the Open Symposium in Granada</u> Please register

CERN Council Open Symposium on the Update of European Strategy for Particle Physics

13-16 May 2019 - Granada, Spain

Physics

List of participants

24 participants



Format of the Open Symposium

Monday Morning Plenary session "Where do we stand" (still to be discussed)

Afternoon Parallel sessions

B1 - Electroweak physics
B2 - Flavour physics and
CP violation
B3 - Neutrinos
B4 - Accelerator science
and technology

Tuesday Morning Parallel sessions B5 - BSM at colliders

B6 - Strong interactions B7 - Detectors and computing B8 - Dark matter and dark sector

Afternoon Parallel sessions

(possible merging) B1 - Electroweak physics B2 - Flavour physics and CP violation B3 - Neutrinos B4 - Accelerator science and technology

Wednesday Morning Parallel sessions (possible merging) B5 - BSM at colliders B6 - Strong interactions B7 - Detectors and computing B8 - Dark matter and dark sector

Afternoon Plenary session "Future facilities" Thursday

Plenary session Summary Reports (8) Close-out

ESG meeting

13-Dec-18

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Proposed Input Themes and PPG/ESG assignments

- Large experiments and projects PPG
- National road maps ESG
- Accelerator Science and Technology Caterina Biscari and Lenny Rivkin
- Beyond the Standard Model at colliders (present and future) Gian Giudice (th) and Paris Sphicas (exp)
- Dark matter and dark sector (accelerator and non-accelerator dark matter, dark photons, hidden sector, axions) Marcela Carena (th) and Shoji Asai (exp)
- Instrumentation and computing Xinchou Lou (exp) and Brigitte Vachon (exp)
- Electroweak physics (physics of the W, Z, H bosons, of the top quark, and QED) Keith Ellis (th) and Beate Heinemann (exp)
- Flavour Physics and CP violation (quarks, charged leptons and rare processes) Belen Gavela (th) and Antonio Zoccoli (exp)
- Neutrino physics (accelerator and non-accelerator) Stan Bentvelsen (astro-exp) and Marco Zito (exp)
- Strong interactions (perturbative and non-perturbative QCD, DIS, heavy ions) Krzysztof Redlich (th) and Jorgen D'Hondt (exp)
- Other (communication, outreach, strategy process, technology transfer, individual contributions,...) ESG

There are 8 physics themes and 3 general ones. The large experiments/projects will be split among the physics themes.



Draft Proposal for plenary sessions

Monday - Plenary							
	9:00 - 9:10	Greetings	10	Wednesay Parallel	9:00 - 10:30	session	
	9:10 - 9:20	Overview of Symposium	10		10:30 - 11:00	coffee break	
	9:20 - 9:30	Goals of the Symposium	10		11:00 - 13:00	session	
	9:30 - 10:00	Outcome of 2013 Strategy Update	25+5				
	10:00 - 10:30	Oustanding questions in particle physics	25+5		13:00 - 14:30	Lunch	
	10:30 - 11:00	Coffee break	30				
	11:00 - 11:25	The American Persective	20+5	Wednesday Plenary	14:30 - 15:00	Physics at hadron colliders	25+5
	11:25 - 11:50	The Asian Perspective	20+5		15:00 - 15:30	Challenges for energy frontier hh colliders	25+5
	11:50 - 12:15	ApPEC roadmap	20+5		15:30 - 16:00	Heavy ion physics	25+5
	12:15 - 12:40	NuPPEC long term plan					
	12:40 - 13:05	Education, Communication and Outreach	20+5	_	16:00 - 16:30	coffee break	
	13:00 - 14:30	Lunch		-			
					16:30 - 17:00	Physics with fixed targets	25+5
Monday Parallel	14:30 - 16:00	session			17:00 - 17:30	Physics with ee collders	25+5
	16:00 - 16:30	coffee break		_	17:30 - 18:00	Challenges for precision frontier ee colliders	25+5
	16:30 - 18:30	session			18:00 - 18:30	Physics with ep/eA colliders	25+5
					18:30 - 19:00	Challenges for high energy ep colliders	25+5

Thursday - summary reports from parallel sessions

To be discussed with PPG



European Strategy Group

Role of the ESG (section 3.2a of the CERN/3092/Rev.2)

- To establish a proposal for the periodic update of the medium- and long-term European Strategy for Particle Physics for submission to the Council for approval
- To draft the Strategy update proposal taking into account, inter alia, the scientific input submitted by the Physics Preparatory Group (drafting session in January 2020)
- To endorse the proposal by consensus prior to the submission to the Council for approval (March 2020)

This implies

- > Revisiting the previous strategy update
- > Proposing additional themes in support of (the realisation of) the scientific programme
- > Forming working/discussion groups around selected themes for the current update
- > Prioritising the scientific programme

First contact established November 26th 2018



Reminder of Organisational Matters discussed in 2013

In parallel to the discussion on scientific issues, ESG deals with organizational and other matters through discussions in working groups (WG)

During the 2013 Strategy update, 5 WGs were set up (see <u>Summary of the 2013 European Strategy</u> <u>Update</u>) to discuss recommendations for

- 1. WG1 Mandate and organisational structure for the Council for the European Strategy and its implementation (to be handled by the President's Group);
- 2. WG2 Organisational structure for European participation in global projects, including the role and definition of the National Laboratories and the CERN Laboratory in the European Strategy;
- 3. WG3 Relations with external bodies, in particular EU-related;
- 4. WG4 Knowledge and technology transfer, relations with industry;
- 5. WG5 Outreach, education and communication



ESG Organisational Matters – proposal

Proposal by Strategy Secretariat of themes to be added to the ESG deliberations during the present Strategy update process

- 1. Interdisciplinary nature of research in particle physics (with the aim to promote accelerator science, detector R&D, computing and engineering in the physics community "au large") to be added to the discussion on technology transfer and outreach/communication
- 2. Social and career aspects of the young generation in long time-scale projects how to make the field attractive and to preserve expertise in all aspects of particle physics science
- 3. Sustainability and environment whether/how to include criteria evaluating energy efficiency and carbon footprint of present and future projects

The ESG members were invited to comment and to propose other themes deemed important for the future of the community.

No input received, but no deadline provided Reminder will be resent after December 18th with deadline

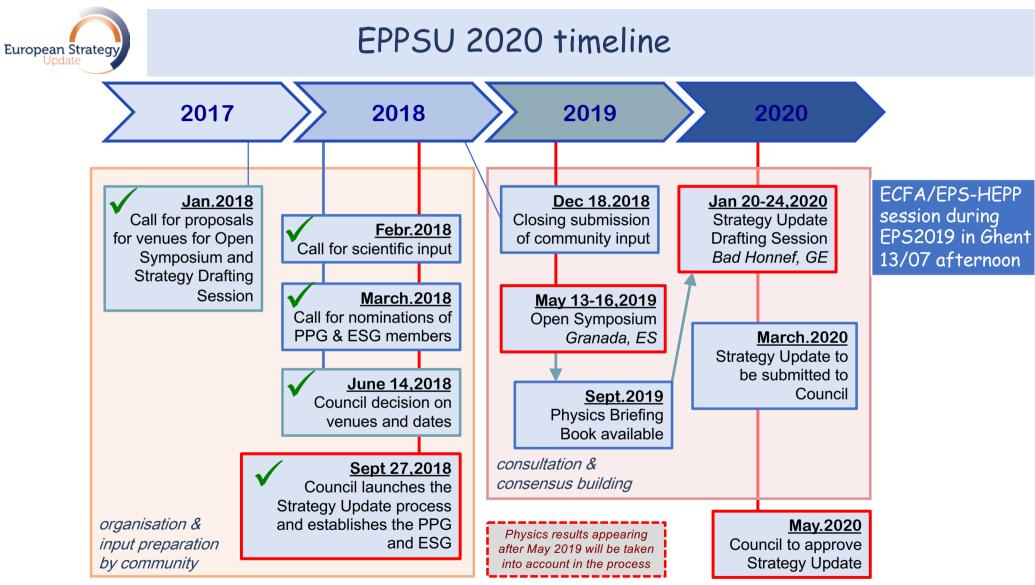


Proposal for ESG meetings

First plenary meeting, Friday March 15, 2019, CERN - review of previous strategy update, converge on main themes for the present update and the mandates and chairs of the agreed upon working groups (to be partly prepared by email communication)

Subsequent plenary meetings for discussions and interim reports:

- > Thursday May 16, Granada
- During Council weeks at CERN, in June 2019, September 2019, December 2019 either Tuesday afternoon and/or Wednesday afternoon.
- > Drafting Session January 20-24, 2020 in Bad Honnef
- > To be considered plenary meeting at CERN in March 2020 to include comments of Council
- Working Group meetings as needed, to be organized by designated chairs of the agreed upon groups



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Gratitude to the Council Secretariat for all the support in particular to Vedrana for all her effort to get the webpages and the submission ready on time

Happy Holidays

