

International Particle
Physics Outreach Group

15th IPPOG Meeting – CERN

News from the Coordination

H.P. Beck, IPPOG Chair, Universität Bern

S. Goldfarb, IPPOG Chair, University of Melbourne

C. Marcelloni, Community Lead, CERN

B. Gulejova, Development Lead, Universität Bern

CERN (14th IPPOG Meeting)



CERN (14th IPPOG Meeting)

Working Groups

- Global Cosmics (Charles, Marge)
- Explaining Hot Physics Topics (Dirk, Thomas)
- Masterclasses to New Countries (Uta, Ken)

Panel Discussions

- Special Events & Exhibitions
- Beauty & Physics
- Broadening the Scope
- IPPOG & Grav

Inside Views of I

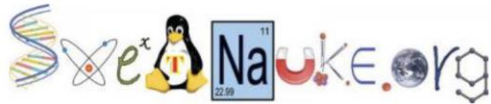
- Australia (Paul), Sweden (Jonas)

Inspiring Success Stories

- Non-Science Festivals (Connie), ScienzaPerTutti (Pasquale), Eclipse Cosmic Adventure (Marge)

Full Agenda
<https://indico.cern.ch/event/674777>

IPPOG In The News



POČETAK O SAJTU VESTI NAUKA ASTRONOMIJA



Snimak predavanja Život svemira

Snimak predavanja "Život svemira" koje je održano u okviru Škole astrobiologije. Ovo predavanje bilo je osmo i poslednje u nizu predavanja u okviru Škole astrobiologije, koju su organizovali Astronomsko društvo ...



sutrašnje tote

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CERN Masterclass 2018 u Srbiji - prijave!

SVET NAUKE 11. 03. 2018. Događaji

U periodu od 15. februara do 28. marta 2018. godine pod pokroviteljstvom CERN-a i grupe IPPOG (International Particle Physics Outreach Group) održaće se 14. međunarodni program "Masterclasses - Hands on Particle Physics". U ovom obrazovno-istraživačkom programu će u okviru 215 naučnih institucija aktivno učestvovati oko 13000 učenika srednjih škola iz 52 zemlje širom sveta.



U Srbiji će Međunarodni čas za 2018. godinu (MC2018) biti održan u vremenu od 09.30 časova:

- 26. marta na Fizičkom fakultetu Univerziteta u Beogradu i na Društvenom fakultetu Univerziteta u Novom Sadu,
- 27. marta na Departmanu za fiziku Univerziteta u Nišu,
- 28. marta na Institutu za fiziku Univerziteta u Kraju.



Prvi deo programa obuhvataće teorijskim i eksperimentalnim aspektima fizike čestica i njihovih interakcija. Drugi deo programa sastoji od vežbi koje uključuju analizu podataka i identifikaciju čestica na osnovu eksperimentalnih događaja evidentiranih na eksperimenatima u CERN-u.

Na kraju dana, učesnici će imati priliku da učestvuju u video-konferenciji na engleskom jeziku sa naučnicima iz CERN-a i učesnicima ovog programa iz ostalih instituta i univerziteta iz nekoliko zemalja širom sveta kod kojih se istog dana organizuje MC2018. Na kraju programa, održava se i popularni kviz iz obrađenog gradiva.

svetnauke.org
11 mar 2018

PADOVAOGGI Sezioni

Scuola

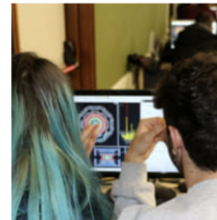
Scuola / Portello

Studenti delle superiori alle prese con i veri dati del Cern a Padova

Redazione PadovaOggi 12 MARZO 2018 14:41

1 Condividi

Nota - Questo comunicato è stato pubblicato integralmente come contributo esterno. Questo contenuto non è pertanto un articolo prodotto dalla redazione di PadovaOggi



Sono 600, quest'anno, gli studenti delle scuole superiori venete che il 14, 15 e 16 marzo potranno fare esperienza diretta di come funzionano le ricerche dei fisici del CERN nell'Università di Padova, grazie all'iniziativa *Masterclass*, coordinata in Italia dall'Istituto Nazionale di Fisica Nucleare (INFN) e realizzata in collaborazione con l'Ateneo. I ragazzi verranno accompagnati dai ricercatori in un viaggio alla scoperta

delle proprietà delle particelle ed esploreranno i segreti di LHC (Large Hadron Collider) del CERN, dove nel luglio 2012 è stato scoperto l'ormai celebre bosone di Higgs.

APPROFONDIMENTI



"Il senso della bellezza - Arte e scienza al Cern" all'MPX

19 dicembre 2017

La giornata si suddivide in lezioni e seminari sugli argomenti fondamentali della fisica delle particelle, a

computer su uno degli esperimenti dell'acceleratore di particelle LHC, dove 100 metri sotto terra, nel tunnel di 27 km sotto Ginevra le particelle si scontrano quasi alla velocità della luce. I ragazzi veneti utilizzeranno i veri dati provenienti dall'esperimento CMS, per simulare negli esercizi l'epocale scoperta del bosone di Higgs, ma anche quella dei bosoni W e Z (proprio quelli che nel 1984 valsero il premio Nobel a Carlo Rubbia), ed esploreranno le caratteristiche di alcune particelle dotate di una proprietà di nome "stranezza" grazie ai dati dell'esperimento ALICE.

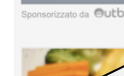
I più letti di oggi



Valore Ripple inarrestabile! Cresce più del Bitcoin ed...
BLOG.Y20.ME



SUV con il migliore rapporto qualità prezzo: la...
TOP.OPINION.IT



padovaoggi.it
12 mar 2018

CASE A PADOVA

Ponte di Brenta
Attico / Mansarda 5 locali
279.000 €
180 m²

Novienta Padovana
Appartamento 4 locali
245.000 €
133 m²

immobiliare.it

IPPOG In The News

UNIVERSITY OF CALIFORNIA, RIVERSIDE 49°

INSIDEUCR

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Research & Scholarship

See Archives »

MARCH 21, 2018

SHARE THIS ARTICLE: [Icons]

Professor Leads Local High School Students in an International Particle Physics Masterclass at UCR

In mid-March, students from Murrieta Valley High School, Centennial High School (Corona), and Sage Hill High School (Newport Beach) visited the Department of Physics and Astronomy to participate in the International Particle Physics Masterclass, an annual program of the European Particle Physics Outreach Group. The Masterclass is an interactive exercise in which high school students analyze actual data from the Large Hadron Collider at CERN, the particle accelerator on the border of Switzerland and France. Following data analysis, students took part in a videoconference with CERN and high school scientists to discuss their findings. Bill Gary, second from left, professor of physics, led the Masterclass at UCR.



ucrtoday.ucr.edu
21 mar 2018

-Iqbal Pittalwala

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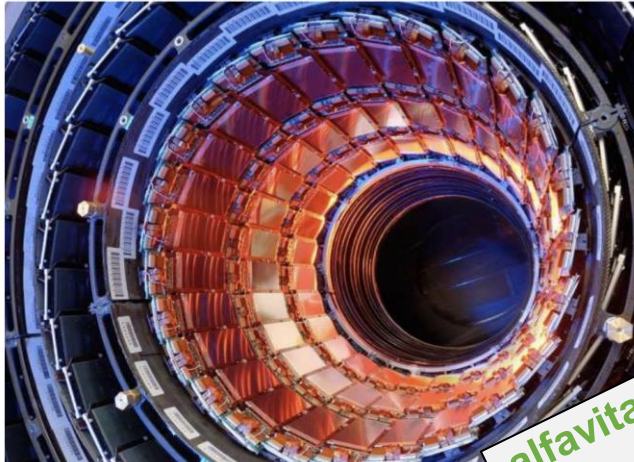
Εκπαίδευση | Πολιτική | Κοινωνία | Κόσμος | Επιμόρφωση | Εργασία | Απόψεις | Επιστήμη | Τέχνες

Ενέργειες

Αρχική >

Μαθητές Λυκείου γίνονται... ερευνητές στο CERN για μία μέρα!

Δημοσιεύθηκε: Τρίτη, 20 Μάρτιος, 2018 - 15:20 | Στην Κατηγορία: Ανακοινώσεις



alfavita.gr
20 mar 2018

Ημερίδα του Τμήματος Φυσικής του ΑΠΘ

Ο Τομέας Πυρηνικής Φυσικής και Φυσικής Στοιχειωδών Σωματιδίων του Τμήματος Φυσικής του ΑΠΘ διοργανώνει ημερίδα Φυσικής Σωματιδίων για μαθητές Λυκείου. Η εκδήλωση εντάσσεται στο πλαίσιο των 14ων Masterclasses στη Φυσική Σωματιδίων (14th International Particle Physics Masterclasses 2018) και θα πραγματοποιηθεί στο Κτίριο της Σχολής Θετικών

Members

	Signing Organisation	Country/Lab/Experiment	Date signed
1	NIKHEF	Netherlands	22 Sep 2016
2	DESY for KET	Germany	23 Sep 2016
3	Physics Department of University of Oslo	Norway	21 Oct 2016
4	LIP	Portugal	1 Nov 2016
5	The Section for Elementary Particle and Astroparticle Physics of the Swedish Physical Society through the Swedish LHC Consortium	Sweden	1 Nov 2016
6	CHIPP	Switzerland	4 Nov 2016
7	Ministry of Education, Science, Research and Sport	Slovak Republic	15 Nov 2016
8	Institute of Atomic Physics	Romania	17 Nov 2016
9	Helsinki Institute of Physics	Finland	29 Nov 2016
10	FWO + F.R.S.-FNRS	Belgium	30 Nov 2016
11	CERN	CERN	19 Dec 2016
12	INFN	Italy	21 Dec 2016
13	CNRS/IN2P3	France	23 Dec 2016
14	The Henryk Niewodniczański Institute of Nuclear Physics Polish Academy of Sciences	Poland	29 Dec 2016
15	CoEPP	Australia	14 Feb 2017
16	The University of Notre Dame on behalf of QuarkNet	USA	14 Mar 2017

Members

	Signing Organisation	Country/Lab/Experiment	Date signed
17	ATLAS Spokesperson	ATLAS	1 Nov 2017
18	BELLE II Spokesperson	BELLE II	19 Feb 2018
19	Institute of Physics of the Czech Academy	Czech Republic	19 Apr 2018
20	Rede Nacional de Física de Altas Energias (RENAFAE)	Brazil	Next Week

Imminent

- Austria
- Greece

In Process

- ALICE Collaboration
- Slovenia

Expression of Interest

- Georgia

New Member Representatives

Welcome



Zdeněk Doležal
Belle II



Marcelo Gameiro Munhoz
Brazil

Candidates

Candidate Membership expires **18 Dec 2018**

- Countries
 - Bulgaria, Denmark, Ireland, Israel, Spain, South Africa, UK
- Scientific Collaborations
 - CMS, LHCb, TOTEM
- Labs
 - DESY (as a lab)

After 18 Dec 2018

- Lose right to vote
- Must “ascend” to MoU to become member

New Representatives

ATLAS Collaboration



Sascha Mehlhase

Sascha Mehlhase
ATLAS Outreach Coordinator
Senior postdoc at Ludwig-Maximilians Universität (LMU), Munich
Ludwig-Maximilians-Universität München Am Coulombwall 1 D-85748 Garching
Sascha.Mehlhase@cern.ch

Sascha is a senior postdoc at Ludwig-Maximilians Universität (LMU), Munich, working on experimental particle physics with the ATLAS experiment at the Large Hadron Collider (LHC), CERN. Sascha completed his PhD in 2010 at Humboldt-Universität zu Berlin and Deutsches Elektronen-Synchrotron (DESY) working on the ATLAS experiment, focusing on top-quark physics and the commissioning of the ATLAS silicon-pixel detector. Since, Sascha has focused his research on searches for exotic long-lived particles. Along with his research Sascha is the current outreach coordinator for the ATLAS experiment.

Over more than ten years, Sascha has been active in particle physics outreach activities, and has - amongst other things - founded the Build Your Own Particle Detector (BYOPD) programme, organising events and activities to get people interested and involved in particle physics.

Sascha is the representative from the ATLAS Collaboration to IPPOG since 2018 taking over from Kate Shaw.



Kate Shaw

New Representatives

Czech Republic



Vojtech Pleskot

USA



Spencer Pasero

Thank You!



Jiri Rames has been an active member of EPPOG/IPPOG, representing the Czech Republic, since its founding in 1997 as the “Network on Public Relations and Explaining Particle Physics.”

European Particle Physics Outreach Group

Minutes of the First Meeting of the Network on Public Relations and explaining Particle CERN Member States

19/09/97

Present: See [Appendix 1](#)

(1) INTRODUCTION

The Director General, Chris Llewellyn Smith, welcomed the participants and gave a brief introduction to the network. He stated that the particle physics community has a moral obligation to inform the public on its activity essential in view of the public's influence on the politicians who provide the funding for research. He stressed among countries in view of the need to optimise the use of resources. He illustrated this by pointing out that the NASA investment in public information systems (e.g. 23 people on Hubble Space Telescope public communication) is selective. It was important to decide: (1) whom are we trying to reach and (2) what are we trying to achieve.

As to who should be carrying out public communications, he considered that it had to be primarily the responsibility given:

(a) that they are based in the Member States, and also larger in number compared to scientists at CERN (6500 research physicists at CERN),

(b) reaching the general public certainly needs the local language; there are 16 Member State languages and a wide range.

He pointed out how CERN could help by playing a coordinating role but stressed that this was a particle physics reviewed potential areas of interest including, ensuring graphics and text are transferred from national pamphlets (PPARC pamphlet on LHC), the Vienna virtual reality project, LHC PR on CD-Rom, sharing experience with supporting material for talks.

He emphasized the importance of being selective on future actions, and collective decision making, pointing out a good long range investment while teachers can amplify the effect. He indicated that if good projects were identified appropriate funding. He concluded by announcing that Frank Close has agreed to act as the coordinator of the Division for one year from December 1, 1997.

Appendix 1: Participants

Austria

Christian Gottfried
Meinhard Regler, RECF A Representative

Belgium

Catherine de Clercq, Univ. Brussels

Czech Republic

Jiri Rames, Institute of Physics, Prague

Finland

Riitta Rinta-Filppula, CERN

France

Geneviève Edelheit, IN2P3, Paris

Germany

Gregor Herten, Univ. Freiburg

Greece

Christine Kourkouvelis, Univ. Athens

Hungary

G. Pocsik, Eotvos Lorand University, Budapest

Italy

Alessandro Pascolini, Univ. Padova

Netherlands

Bertus Koene, NIKHEF
Jacques Visser, NIKHEF

Norway

Lars Bugge, Univ. Oslo
Egil Lillestøl, Univ. Bergen

Poland

Jacek Turnau, Institute of Nuclear Physics

Portugal

Maria Abreu, CERN

Slovak Republic

Pavol Murin, Inst. of Exp. Physics, Slovak Academy of Sciences

Spain

Antonio Ferrer, Univ. of Valencia

Sweden

Erik Johansson, Univ. of Stockholm

Switzerland

Claude Joseph, Univ. of Lausanne

United Kingdom

Christine Sutton, Univ. Oxford

DESY

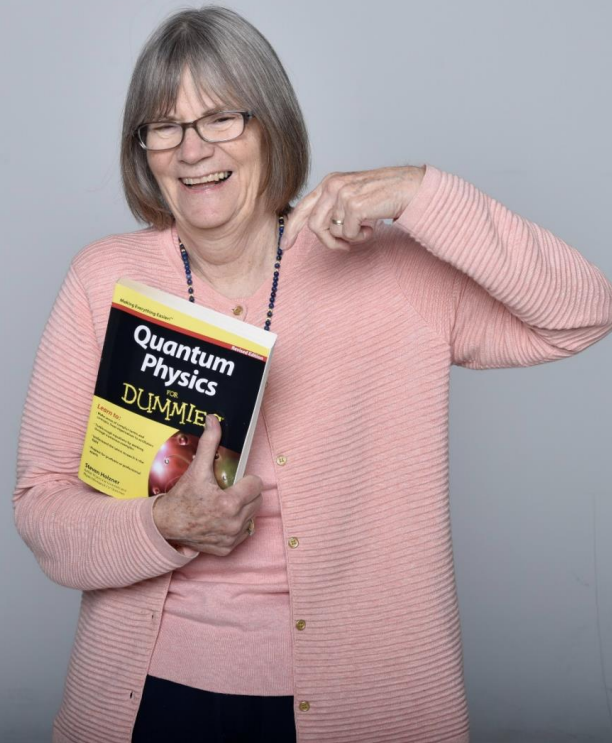
Petra Folkerts

CERN

John Ferguson
Frank Close
Maurice Jacob
Peggie Rimmer
Neil Calder
Mick Draper

Thank You!

Marge Bardeen has been an active member of IPPOG since 2009, bringing the USA on board as members, hosting an IPPOG meeting at Fermilab, and serving as Chair 2012-2016, during our transition to a collaboration. She currently chairs the Global Cosmics Steering Group.



Particles4U Competition

European Laboratory for Particle Physics



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International Particle Physics Outreach Group

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HOME > THE IPPOG PARTICLES4U COMPETITION

The IPPOG Particles4U Competition



Particles4U

Particles4U is a competition for young students and teachers, sponsored by the European Physical Society (EPS), and organised by the International Particle Physics Outreach Group (IPPOG). We at IPPOG are scientists, communicators, and educators engaged in particle physics outreach around the world. But, sometimes, we need the help of experts, and that is where you come in...

Particles4U Competition

Announcements

- Home Page, Facebook, Twitter (21 Nov 2017)
- Relied on local networks
- Application forms translated in **18 languages**
- Two categories (12 & Under, 13 & Up)

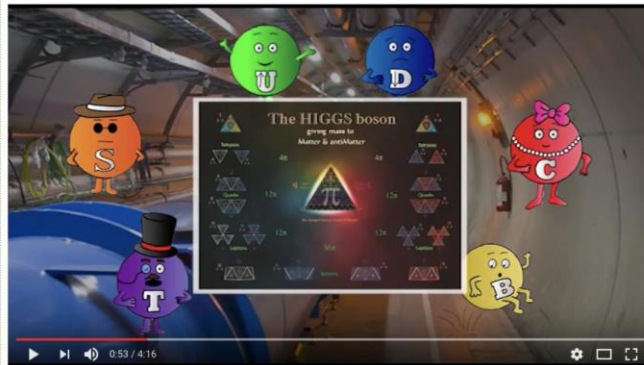
Participation

- 89 responses (77 legitimate)
- Austria (1), **Brazil (14)**, **Bulgaria (22)**, Colombia (1), France (3), Greece (4), **Iran (15)**, Italy (1), Japan (2), Philippines (1), Poland (2), Slovakia (4), Slovenia (1), South Africa (1), Spain (4), and USA (1)

Particles4U Competition

Primary School (Age 12 and under) Winners

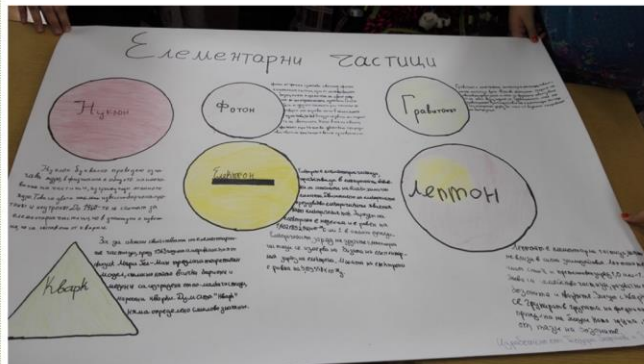
2nd and 6th Primary Schools of Artemida, Athens, Greece



Students from the 2nd and 6th primary schools of Artemida, a region near Athens, Greece combined particle physics with humor and to imagine a dialogue among particles. Their video is called "The Quark Show."

- Award: A school visit from a particle physicist, an award certificate, and a special gift from CERN for each of the participants.

St. Kliment Ohridski Primary School of Pavlikeni, Bulgaria

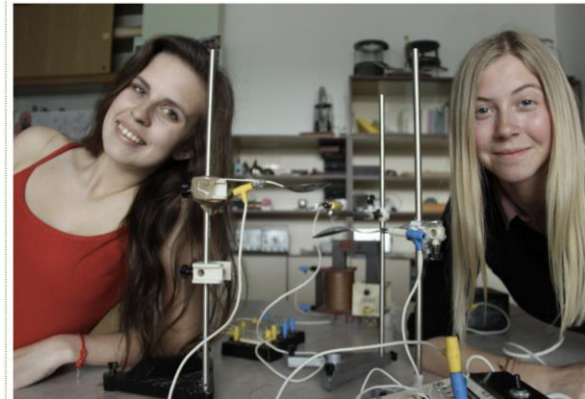


Two young students from the St. Kliment Ohridski primary school in Pavlikeni, Bulgaria, developed posters that describe the fundamental building blocks of nature, to be used in primary school for educational purposes.

- Award: A school visit from a particle physicist, an award certificate, and a special gift from CERN for each of the participants.

Secondary School (Age 13 and up) Winners

Ludovita Štúra high school in Zvolen, Slovakia



Two students from the Ludovita Štúra high school in Zvolen, Slovakia constructed a low-cost Paul ion trap and then demonstrated the trapping of ions using green laser light. They developed an instruction booklet with physics explanations.

- Award: A school visit from a particle physicist, an award certificate, and a CosmicPi detector for the school, for detecting and measuring cosmic rays.

Maria Regina Gymnasium in Vienna, Austria



Pupils of class 6C of the Gymnasium Maria Regina in Vienna produced chocolates, cookies, chewing-gum, handkerchiefs, bottles, etc. decorated with funny and imaginative illustrations on elementary particles, including information on the particles.

- Award: A school visit from a particle physicist, an award certificate, and a CosmicPi detector for the school, for detecting and measuring cosmic rays.

Particles4U Competition

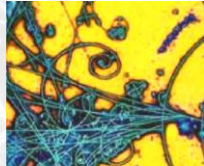
WINNER CERTIFICATE FOR
PARTICLES4U

THIS IS TO CERTIFY THAT

**St. Kliment
Ohrid
School
Pavlik**

won the 2018 IPPOG Particles4U
primary schools (age 12 and over)

ATANAS IVANOV BATINKOV
IPPOG REPRESENTATIVE
BULGARIA



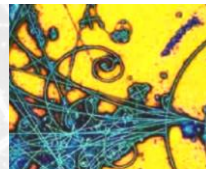
WINNER CERTIFICATE FOR
PARTICLES4U

THIS IS TO CERTIFY THAT

**The 21
Prima
of Art
Athen**

won the 2018 IPPOG Particles4U
primary schools (age 12 and over)

NICHOLAS TRACAS
IPPOG REPRESENTATIVE
GREECE



WINNER CERTIFICATE FOR
PARTICLES4U

THIS IS TO CERTIFY THAT

**Gymnasium
Maria Theresia
Vienna,**

won the 2018 IPPOG Particles4U
secondary schools (age 13 and over)

NATASCHA HÖRMANN
IPPOG REPRESENTATIVE
AUSTRIA

HANS PETER BECK
IPPOG CHAIR

WINNER CERTIFICATE FOR
PARTICLES4U

THIS IS TO CERTIFY THAT

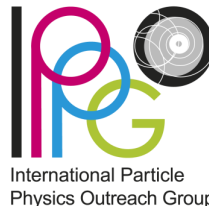
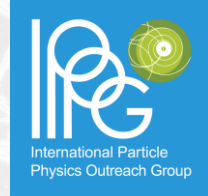
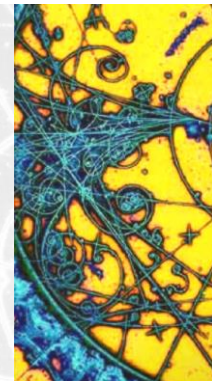
**Ľudovíta Štúra
High School in
Zvolen, Slovakia**

won the 2018 IPPOG Particles4U competition for
secondary schools (age 13 and over).

IVAN MELO
IPPOG REPRESENTATIVE
SLOVAKIA

HANS PETER BECK
IPPOG CHAIR

STEVEN GOLDFARB
IPPOG CHAIR



Working Group Reports

Bringing Masterclasses to New Countries

- Conveners: Uta Bilow, Ken Cecire

Explaining Particle Physics Hot Topics to a Lay Audience

- Conveners: Thomas Naumann

Exhibits

- Convener: Catia Peduto

Discussion Panels

Broadening the physics scope of Masterclasses (Ken Cecire, Uta Below)

- New directions in physics, experiments, methods, data

Communication Platforms & Strategy (Steve)

- What will be our strategy and who will lead the effort?

Diversity in Science & Technology (Alberto Ruiz)

- How does diversity improve science?
- What new efforts can we take to improve diversity in our field?

CB Discussions & Votes

Points for Discussion on Saturday

- IPPOG Contribution to European Strategy Update
<https://cds.cern.ch/collection/SPC%20-%20Scientific%20Policy%20Committee>
- Financial Statement 2017
- Candidate Member Expiration
- Next Meeting Venue