LHCP Conference Series:

Summary of LHCP 2019, status of LHCP 2020

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IAC Chair, LHCP 2020

(On behalf of the LHCP 2020 Steering Committee)
Large Hadron Collider Physics (LHCP) conference

• Successful fusion of two international conference series
  • Physics at Large Hadron Collider
  • Hadron Collider Physics Symposium

• Review of the latest experimental and theoretical results from the LHC physics program
  • Unique international venue for lively scientific discussions focused on LHC physics, detector technology, upgrades, and future physics opportunities
  • Typical attendance: 300 – 400, > 25% students

• Emphasis on engaging early career scientists and the public
  • Plenary talks: Young Scientist Forum, Outreach efforts @ LHC
  • Public outreach: each edition features a public event in the local language
  • Strong encouragement for experiments to select a diverse and outstanding set of junior scientists to give talks and present posters
LHCP Organization

• **Committees**
  • International Advisory Committee (IAC)
  • Conference Co-chairs (2 international, 2 local)
  • Local Organizing Committee (LOC)
  • Programme Committee (PC)
  • Scientific Secretariat
  • Technical Secretariat
  • Steering Committee, consisting of
    • International Conference Co-chairs
    • Chairs of the IAC, LOC, and PC
    • Scientific Secretariat

• **Continuity**
  • International Co-chairs serve two years as Conference Co-Chair, then one year as IAC Chair, then one year as IAC Deputy Chair
Venue Rotation

• **LHCP rotates through three regions in a four-year cycle**
  • Europe → Americas → Europe → Asia & Oceania
  • Competitive bidding process (typically 3 – 4 very strong bids each year)
  • Venue for LHCP(N) is selected at the IAC meeting during LHCP(N – 2)
    • Ex: during LHCP 2019, the IAC selected Taipei to host LHCP 2021

• **Past and future venues**
  • 2013 – Barcelona, Spain
  • 2014 – New York, USA
  • 2015 – St. Petersburg, Russia
  • 2016 – Lund, Sweden
  • 2017 – Shanghai, China
  • 2018 – Bologna, Italy
  • 2019 – Puebla, Mexico
  • 2020 – Paris, France
  • 2021 – Taipei, Taiwan
Summary of LHCP 2019 (Puebla, Mexico)

• **Venue:** BUAP
  - Outstanding support from student volunteers and local organizers
  - A very successful conference with high quality presentations

• **Stats**
  - Standard / Student (late) fees: 450 / 220 CHF (510 / 300 CHF)
  - Participation: 391 (35% students, > 20% female)
  - Presentations: 58 plenary (26% female) and 133 parallel talks
  - Posters: lively session with ~ 100 posters
    - The five best posters each received a prize of 500 euros
  - Keynote speaker: Prof. Andres Sandoval gave an overview of cosmic ray results, including HAWK (based in Puebla)

• **Outreach**
  - ORIGIN Art exhibition and prizes
    - Included contributions from local high school students / teachers
  - Public event including a science talk in Spanish and a concert featuring a theramin and the BUAP “cosmic piano”
  - A very special form of outreach to the local community (next slide)
LHCP 2019: making a real difference

• Throughout the conference, leftover food from the coffee breaks was donated to the Casa Del Sol orphanage and school in Puebla.

• In addition, at the end of the conference, participants were encouraged to donate their ‘spare’ pesos, which yielded a total cash donation of 4,825.50 pesos (> 200 CHF).

• This money will be used to support 3 children in the orphanage school, and the local university student helpers (“blue shirts” on previous slide) are returning in August to play science/physics games with the children.

IUPAP funds were used to directly support students who contributed to this effort!
Preparations for LHCP 2020 began before the start of LHCP 2019

Local Co-chairs:
Giovanni Marchiori (LPNHE)
Roberto Salerno (LLR)

International Co-chairs:
Bruno Mansoulie (IRFU-CEA)
Tulika Bose (Wisconsin)

IAC Chair:
Jim Olsen (Princeton)

IAC Deputy Chair:
Aleandro Nisati (Rome)

Programme Committee Chairs:
Gautier Hamel de Monchenault (CEA)
Pierre Savard (Toronto)

Scientific Secretaries:
Zaida Conesa Del Valle
Yasmine Amhis

Francesco Polci (LPNHE) G. Marchiori (LPNHE) R. Salerno (LLR)
Funding

• Conference fees:
  • student early (late) = 240 (290) euros
  • Regular early (late) = 410 (490) euros

• Since LHCP is an LHC-centric conference, CERN provides generous support (10kCHF)

• In addition, local and regional organizations typically provide an equivalent contribution to that of CERN. For LHCP 2020: IN2P3, IRFU, P2I so far.

• As was true the last two years, any IUPAP funding we receive will go to support students and early career scientist to attend and give presentations.
The broad outline of the scientific program is similar to past editions: plenary and parallel sessions interspersed throughout the week.

A public outreach event is in the preparation stage.

Taking advantage that it is Paris, and to save money overall, no formal excursions are planned. Tourist agents will be available for consultation.

To summarise participants will have within paid fees: 10 coffee breaks + 4 buffet lunches + 2 lunch boxes + reception cocktail + “wine & cheese” session + gala dinner.
Takeaway

• Many thanks to IUPAP for their generous support of LHCP during 2018 and 2019! Your contribution made a real difference!

• IUPAP funding was used exclusively to support the participation of students and early career physicists from the local and international scientific communities to attend LHCP, give talks, and present posters.
  • LHCP 2018: 100% of IUPAP funds went to support participation (mostly partial or complete fee waivers), and most of this support (~ 70%) went to students and early career physicists
  • LHCP 2019: 100% of IUPAP funds went to support participation, 60% for students, 27% for postdocs, and 13% for faculty

• We are requesting continuing support to maintain this tradition and enable the vibrant contribution of young scientists to LHCP 2020.