

Implications of LHCb measurements and future prospects

2017 edition

Joint LHCb-Theory workshop

CERN, 8-10 November 2017

<https://indico.cern.ch/event/646856/>

Welcome...

- ...to the 2017 edition of this yearly series of workshops between **the LHCb collaboration and the theory community**, following the tradition initiated in 2011!
- As in past years, the purpose of the meeting is **to consider the latest results from LHCb, discuss possible interpretations and identify important channels and observables** to test leading theoretical frameworks in the near and longer term future of the LHCb data taking

Organising committee and conveners

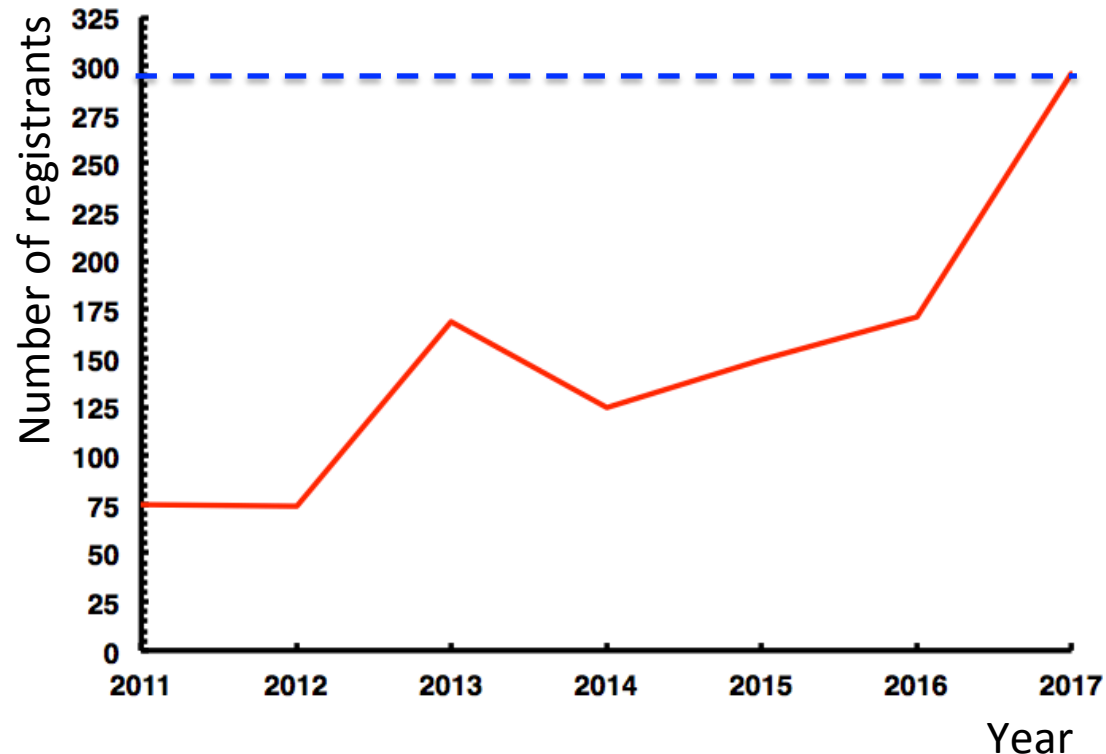
- This year the organising committee includes
 - Alexander Lenz, Chris Parkes, David Straub, Fulvia De Fazio, Giovanni Passaleva, Marie-Hélène Schune, Patrick Koppenburg, Tim Gershon and Vincenzo Vagnoni
- There will be four “physics streams”, with three conveners each
 - Mixing and CP violation in Beauty and Charm
 - Alex Pearce, Stefan Schacht, Wenbin Qian
 - Semileptonic decays, rare decays, and tests of lepton flavour universality
 - Danny van Dyk, Marianna Fontana, Stefanie Reichert
 - Electroweak physics, heavy flavour production, implications for (n)PDFs, and exotica searches
 - Emilie Maurice, Martino Borsato, Rhorry Gauld
 - QCD spectroscopy and exotic hadrons
 - Graham Moir, Ivan Polyakov, Jibo He

Agenda

- Each of the four physics streams is subdivided in two sessions with different allocated times and talk numbers according to the phase space to be covered
- There will be 44 talks in the streams, plus a closing keynote session with two further talks
- The vast majority of talks are from theory and phenomenology
- The few LHCb experimental talks in the four streams are intended to give an overview of the present status and prospects rather than details on the various experimental aspects
 - There's a number of new results that will be shown here for the first time
- The agenda is very packed, so we must ask all speakers to strictly respect their assigned timing in order to allow for comprehensive discussions

Attendance

- This year there has been an exponential growth of attendance, that forced us to move from the traditional place, where previous editions were held, to the main CERN auditorium
- Although the auditorium might give the impression of a more formal meeting, **we encourage all of you to be as informal as possible in the discussions that will take place**



Writeup

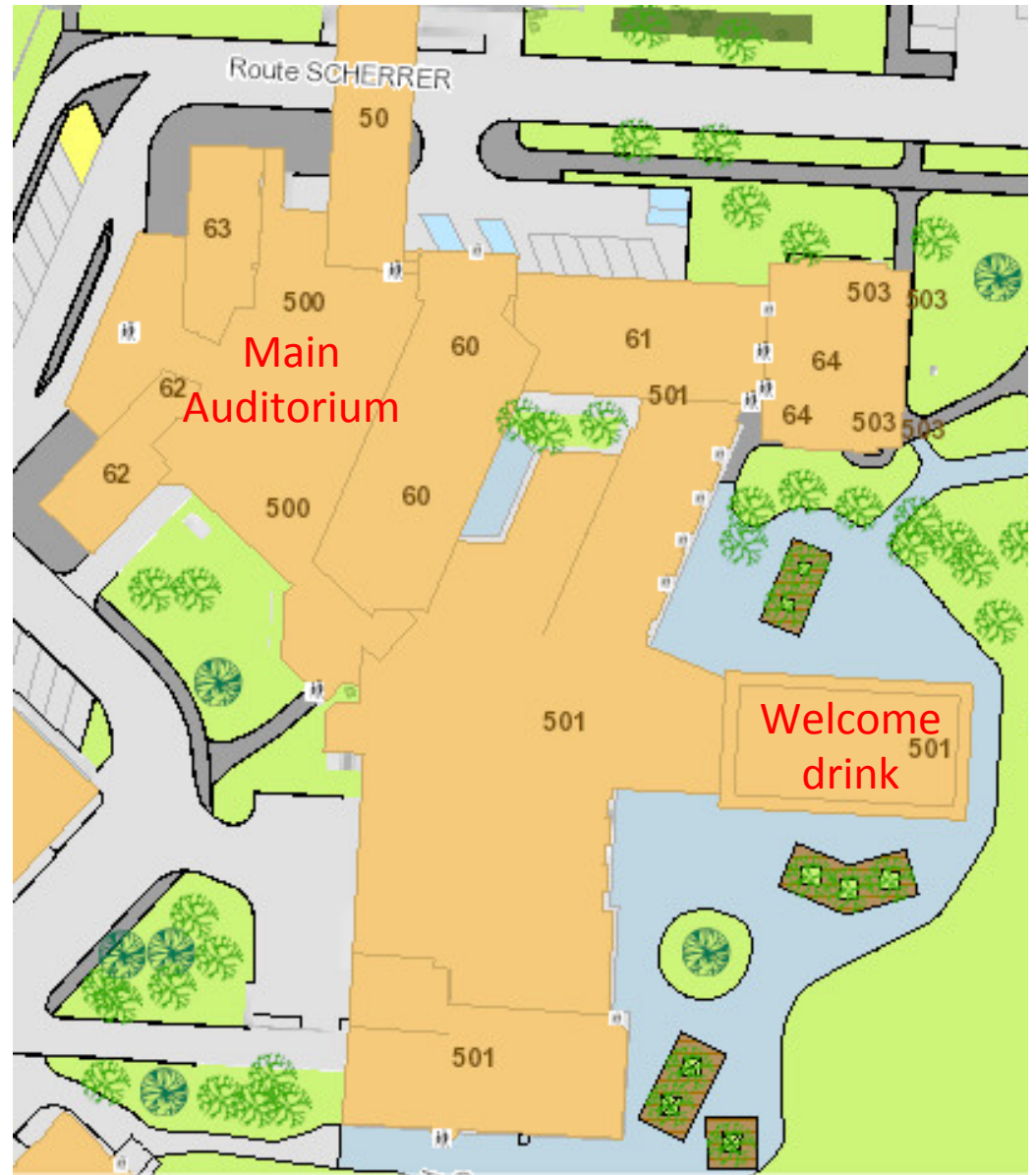
- Last year we had the plan to produce after the implications workshop a document focussing on the physics case for a 300 fb^{-1} LHCb upgrade II
 - A committee of three editors was established
Tim Gershon, Gino Isidori, Patrick Koppenburg
- However, we realised quite soon that **things were moving too fast**, and that discussions made at the 2016 workshop would have become outdated too early
 - LHCb submitted an **Expression of Interest** to the LHCC in February this year, <https://cds.cern.ch/record/2244311>
- Hence it was decided to publish the writeup this year, soon after this workshop, with the same editor committee

Vidyo connection for remote participation

- Due to the large number of attendants and to the large density of talks, it has been decided **to restrict remote participation to listening only**, without the possibility to intervene in the discussions
 - This obviously excludes two speakers that will give their talks from remote
- A PIN code has been distributed to registrants and upon request, and **this has not to be spread around** since participation is restricted to LHCb and theory colleagues only
- In the event that some colleagues may want to connect from remote and do not have a PIN yet, please tell them to send a message to Vincenzo.Vagnoni@cern.ch

Welcome drink

- A welcome drink with some food will be served today at about 7:45 PM at Restaurant 1



3...2...1...go!