Implications of LHCb measurements and future prospects

10th edition 28-30 October 2020

Joint LHCb-Theory workshop

Welcome

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

Organization

This year the organising committee includes:

Alexander Lenz, Chris Parkes, Danny van Dyk, Guy Wilkinson, Jure Zupan, Marco Pappagallo,
Matthew John Charles, Monica Pepe-Altarelli, Niels Tuning, Svetlana Fajfer, Yasmine Amhis

<u>Scientific programme shaped by the Stream conveners:</u>

- Mixing and CP violation in charm and beauty
 - Donal Hill, Laurent Dufour (LHCb)
 - Stefan Schacht, Teppei Kitahara (Theory)
- Rare, radiative, and electroweak-penguin decays
 - Eluned Smith, Renato Quagliani (LHCb)
 - Meril Reboud, Olcyr Sumensari (Theory)
- Semileptonic decays
 - Suzanne Klaver, Julian Garcia Pardinas (LHCb)
 - Ivan Nisandzic, Ana Penuelas Martinez (Theory)
- QCD spectroscopy and exotic hadrons
 - Misha Mikhasenko, Giovanni Cavallero (LHCb)
 - Luka Leskovec, Deborah Roenchen (Theory)
- Exotica and Heavy Ion physics
 - Jiayin Sun, Fede Leo Redi (LHCb),
 - Yotam Soreq, Iftah Galon (Theory)

Program

Relatively light program: 27 presentations (1/3 less than usual)

• Start: 10:00

• Lunch break:

• End: ~16:15

| | Wed 28 Oct | Thu 29 Oct | Fri 30 Oct |
|------------|---------------|---------------|---------------|
| Morning | Opening | Spectroscopy | Rare Decays |
| | IFT | | |
| Discussion | 12:00 - 12:30 | 12:00 - 12:30 | 12:30 - 13:00 |
| Lunch | 12:30 - 13:30 | 12:30 - 13:30 | 13:00 - 14:00 |
| Afternoon | CPV + mixing | Semileptonics | QEE |
| | | | Closing |

Program

- LHCb / Theory ~ 50/50
- Large effort by many analysts and reviewers to obtain new results this week!

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Zoom rooms and discussion

Two zoom rooms in parallel:

Workshop / presentations: <u>92523264110</u>

Discussions / coffee: 91032529784

- Same password: xxxx (B_s^0 mass)

Both rooms are open throughout workshop

- Discussion / coffee zoom room:
 - For discussions after/between the talks
 - Can also be used during talks, for informal chats
 - We encourage all of you to be as informal as possible in the discussions that will take place ©
- Presentation: please switch camera on for a personal 'feel'
- Questions: please use "raise-hand" feature in zoom

Recordings

- For our colleagues in other time zones,
- we will try to record the presentations

Many thanks for your contribution!

