

Bfys Workshop “Commonalities”

Heijenrath, 29-31 May, 2017

Commonality: *The fact of sharing interests, experiences or other characteristics with someone or something.*

The theme of our workshop this year is *commonalities*. Commonalities can appear at different levels in our work:

- There may be new physics in action (Z' , LQ, ...) affecting several (many?) flavor physics measurements.
- There may be detector aspects (Velo double metal layer, electron efficiency, ...) affecting various measurements.
- There may exist new analysis techniques in other areas (in general in physics or in other LHCb analyses than your own) that you can apply in your own work leading to novel developments.
- ...

Are there reconstruction or detector effects that have wide applicability? Can you apply ideas of other area's as new developments into your own analysis? At the workshop we will work in groups on a few topics (e.g. theory/analysis, reconstruction, detector) with the concept of commonality in mind. On the first day of the workshop each group is asked to present their ideas and we will proceed in the true spirit of a interactive workshop from there-on.

What do I ask from you?

At the end of this announcement there are several suggestions of discussion topics. Please “subscribe” to one of them or propose a new topic. In the latter case please discuss with a few colleagues and let me know which topic you propose to contribute to. I will then make an agenda accordingly.

Please give me your feedback before Friday May 5.

After this date I plan to proceed to finalize the agenda.

Preliminary agenda: the idea of this workshop is to balance presentations with discussions. The tentative agenda is as follows:

Monday May 29:

(14h00 – 18h00) Group presentations of our ideas

(19h00 – 22h00) Walk and dinner in Teuven (www.cafemodern.be)

Tuesday May 30:

(09h00 – 13h00) Working in groups and discussions

(14h00 – 18h00) Visit and tasting in Val-Dieu (www.abbaye-du-val-dieu.be)

Wednesday May 31:

(09h00 – 13h00) Plenary feedback of working groups and further discussions

Here are some suggestions for discussion topics to choose from:

Theory & Physics:

- Given the number of flavor observations do we currently have evidence of a deviation of the Standard Model?
- How to make the step from SM-EFT fits to a new model (“UV completion”)
- What should be our LFNU/LFV focus: electrons vs muons or electrons vs taus?

Reconstruction:

- “Electrons for everyone”: electron reconstruction and efficiency determination
- Track fitting and the Bfield map: new ideas
- Further useage of per-event errors

Detector:

- Velo clusters: resolutions (angled tracks) and efficiencies (eg. double metal layer effect)
- SciFi resolution: mechanical effects, alignment and digitization

Practicalities:

The venue of the workshop is: www.smockelaer.nl

Travel arrangements to Heijenrath will be made in due time. Please let me know if you plan to go by car and can give a ride to others.

Please send me your feedback. Looking forward to a stimulating workshop,

Cheers (Adieje-wah),

- Marcel

Addendum: list of participants:

1. Marcel Merk
2. Wouter Hulsbergen
3. Niels Tuning
4. Antonio Pellegrino
5. Gerhard Raven
6. Gerco Onderwater
7. Patrick Koppenburg
8. Tjeerd Ketel
9. Greg Ciezarek
10. Sean Benson
11. Flavio Archilli
12. Gilberto Tetlalmatzi-Xolocotzi
13. Maarten van Veghel
14. Mick Mulder
15. Laurent Dufour
16. Jacco de Vries
17. Lennaert Bel
18. Lex Greeven
19. Elena Dall'Occo
20. Katya Govorkova
21. Elianna Kraan
22. Mauricio Feo
23. Jirong Cang
24. Jim Baarslag
25. Michiel Veen
26. Hilbrand Kuindersma
27. Ruben Jaarsma
28. Pablo Kebees
29. Lais Soares Lavra