Bfys Workshop "The Expert and the Newcomer's View"

Groenlo, 25 – 27 June, 2018

Analyses in LHCb are increasingly of very high (statistical) precision; detector work is aimed at achieving an accordingly precise upgrade detector, while at the same time there are opportunities for new ideas/developments for a phase-II upgrade LHCb experiment. Each of us is an expert in one or more areas of technology or analysis work.

The theme of this year's workshop is *"the expert and the newcomer's view"*. New ideas of the expert often arise while giving explanations to a newcomer, while the newcomer has an open mind of asking "unexpected questions" and come up with "crazy ideas". You are invited to do so at this workshop!

During this workshop you will play both the role of "expert" and of "newcomer". A "newcomer" does not mean that you will actually start to do that research, but that you adopt *a newcomer's view*, or put otherwise *an outsider's view* to the research.

Here is the list of topics, and the list of assigned "experts" and "newcomers". Please check that your name appears twice below: once in blue and once in purple.

- 1. Vertexing (technology) in phase-II upgrade
 - a. Expert view: Daniel, Tjeerd, Wouter
 - b. Newcomer view: Gerhard, Jeroen, Julius, Michele
- 2. Long-lived particle searches and other exotica
 - a. Expert view: Carlos, Elena, Igor, Danny
 - b. Newcomer view: Patrick, Mick, Jordy, Roman
- 3. Strategies for very rare decays and LFV
 - a. Expert view: Flavio, Gerco, Hilbrand, Koen
 - b. Newcomer view: Cristina, Lennaert, Luis, Niels
- 4. Optimizing (the technology of) momentum measurement now and in future
 - a. Expert view: Antonio, Jacco, Mauricio, Roman
 - b. Newcomer view: Elena, Igor, Sevda, Tjeerd
- 5. CP violation and detector effects
 - a. Expert view: Emma, Jeroen, Laurent, Michele, Sevda
 - b. Newcomer view: Gerco, Koen, Maarten, Marinda
- 6. Online reconstruction algorithms
 - a. Expert view: Gerhard, Julius, Luis, Sean
 - b. Newcomer view: Antonio, Carlos, Daniel, Mauricio
- 7. Detecting leptons
 - a. Expert view: Cristina, Maarten, Mick, Patrick
 - b. Newcomer view: Danny, Hilbrand, Jacco, Sean
- 8. Branching Ratios
 - a. Expert view: Jordy, Lennaert, Marinda, Niels
 - b. Newcomer view: Emma, Flavio, Laurent, Wouter

What do I ask of you? The plan of the workshop is a mix of presentations, discussions and "hackaton" and is as follows:

- Before the workshop: the expert group prepares a presentation on the motivation and plans of their research
- Workshop day 1: presentation of the expert slides by the newcomer group
- Workshop day 2: *round table discussions* on the topics
- Workshop day 3: new ideas presented by the expert groups

Preliminary agenda: the idea of this workshop is to balance presentations with discussions. Here is a tentative agenda (more details are on indico):

Monday June 25:

(14h00 – 18h00) Group presentations of expert slides *by the newcomers*. (19h00 – 21h00) Dinner and drinks

Tuesday June 26:

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

(14h00 – 17h00) Outdoors activity

(19h00 – 21h00) Dinner and drinks

<u>Wednesday June 27:</u> (09h00 – 13h00) Plenary feedback of new ideas/insights/etc **by the experts**.

Practicalities: The venue of the workshop is: http://www.reirinck.com Travel arrangements to Groenlo will be made in due time.

Looking forward to a stimulating workshop, Cheers, - Marcel

Addendum: list of participants:

- 1. Flavio Archilli
- 2. Lennaert Bel
- 3. Sean Benson
- 4. Stan Bentvelsen
- 5. Jordy Butter
- 6. Elena Dall'Occo
- 7. Maurice Dekker
- 8. Laurent Dufour
- 9. Sevda Esen
- 10. Mauricio Feo
- 11. Roman Greim
- 12. Wouter Hulsbergen
- 13. Daniel Hynds

14. Tjeerd Ketel 15. Patrick Koppenburg 16. Igor Kostiuk 17. Hilbrand Kuindersma 18. Marcel Merk 19. Mick Mulder 20. Gerco Onderwater 21. Antonio Pellegrino 22. Gerhard Raven 23. Jose Luis Rodrigo Ramon 24. Julius Roeder 25. Cristina Sanchez Gras 26. Emma Schepers 27. Maxime Schubiger 28. Marinda Tervoert 29. Niels Tuning 30. Jeroen van Tilburg 31. Carlos Vázquez Sierra 32. Maarten van Veghel 33. Michele Veronesi 34. Jacco de Vries 35. Danny Wernik