

# **EoS Solstice meeting 2019**

Tomas Kello on behalf of EoS PhD students

19.12.2019

ULB,Brussels











#### Common activities

- regular meetings in our WP groups
- EoS PhD Days 2019 Louvain La Neuve (report)
  - ✓ Progress presentations
  - ✓ Discussion about the future plans and Survey
  - ✓ Workshop: MadGraph
  - ✓ Workshop: Machine learning
- Status & Quality surveys (report)
  - ✓ Volume 1: 21.2.2019 (online) results presented at SB meeting
  - ✓ Volume 2: 12.11.2019 (during EoS PhD Days)
- BND school, CMS DAS school, ...

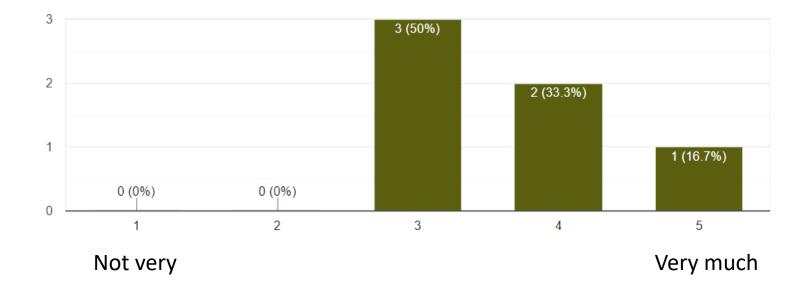
- together ~30 participants, 8 PhD speakers, 4 lecturers
- thanks to the help from UCL locals!

#### PhD presentations

- Mostafa Mahdavi-Khorrami Off-shell H decays, tests of Higgs width and anomalous couplings
- Tomas Kello On-shell H → WW\* in ggH and VBF production
- Hesham El Faham Differential ttH multilepton analysis and EFT interpretation with full Run II data
- *Tu Thong Tran* Measurement of ttW cross-section and charge asymmetry
- Khawla Jaffel Search for the 2HDM neutral Higgs bosons through the H->ZA->Ilbb process Full Run II
- *A.R. Sahasransu* Displaced particles
- Liam Weyenbeek Searches for SUSY and HNL in multilepton final states with  $au_h$
- Florian Bury MoMEMta and Deep Neural Networks, a method to produce Matrix Element weights for LHC analyses

PhD@be.h Status&Quality Survey Vol.2

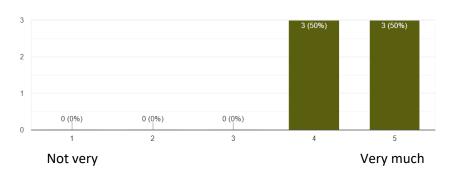
[First day] Do you think that answering an anonymous questionnaire about PhD's problems/needs/compliments will address the right people and help problems solved? 6 responses



#### Discussion about the future plans

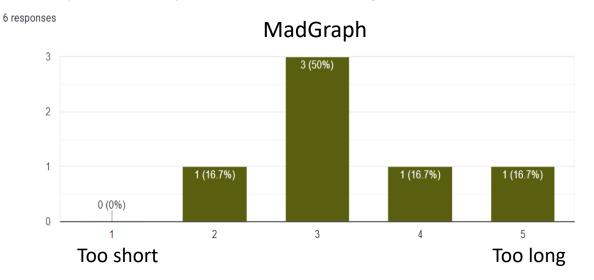
- importance of outsourcing organization duties was stressed
- call for more one-day workshops a.k.a. lectures on demand
  - ➤ (advanced) statistics looking for lecturers
  - more of Machine learning looking for lecturers
  - programing skills specific demands need to be found
  - > soft skills redirected to doctoral schools offer (but also possible to organize)
  - accelerator physics
  - **>** ...
- involving PhD students and postdocs in small projects which offer hands-on experience (also outside the strictly academic sphere), such as MYRRHA project
- Status&Quality Survey Vol.3 (around summer 2020)
- EoS PhD Days 2020
- establish better communication channel

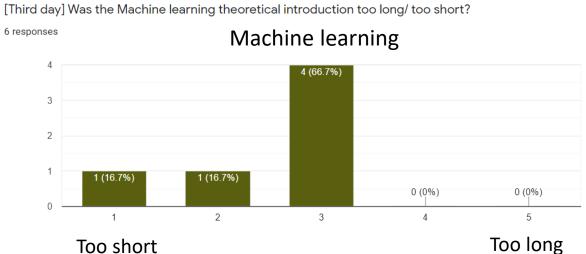
[First day] Have you found useful to discuss future activities involving PhD students?



- Workshops
  - theoretical part

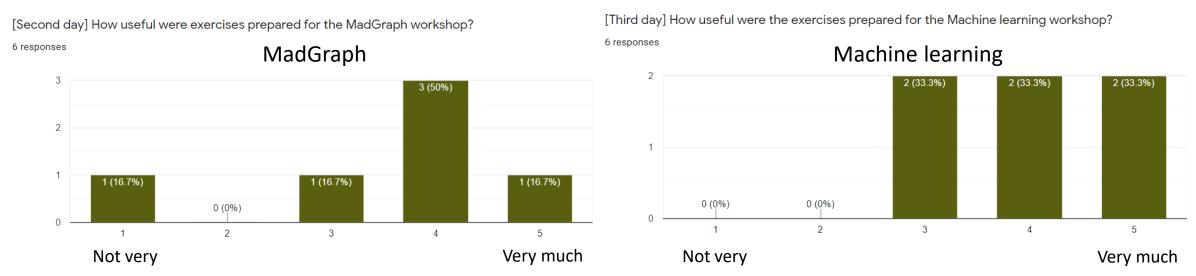
[Second day] Was the MadGraph theoretical introduction too long/ too short?

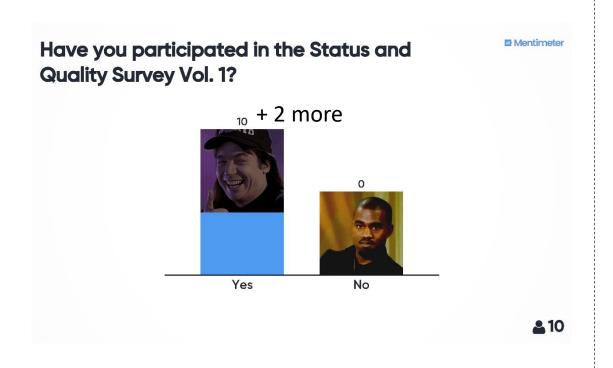




#### Workshops

- theoretical part
- exercises
- 'Peers to peers' model of lectures worked out very well!
- many thanks to all of the lecturers

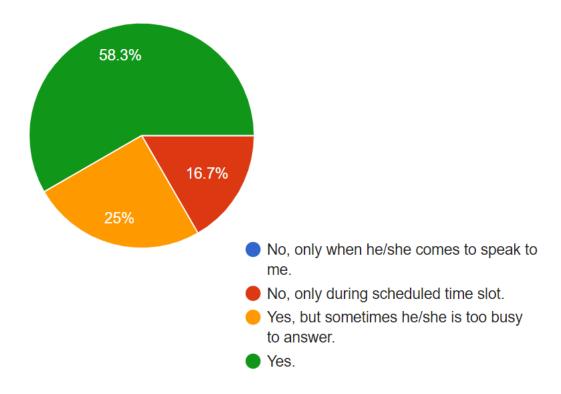


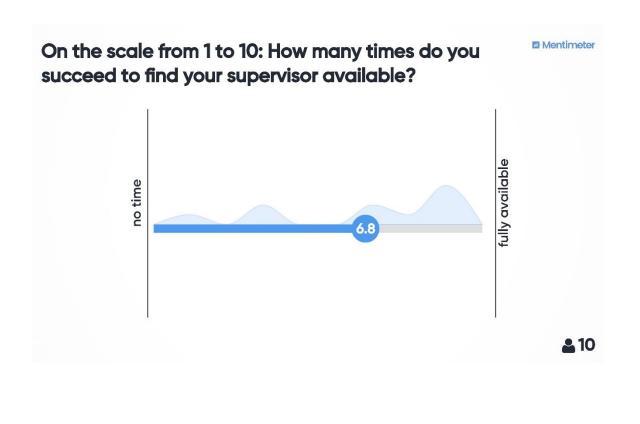




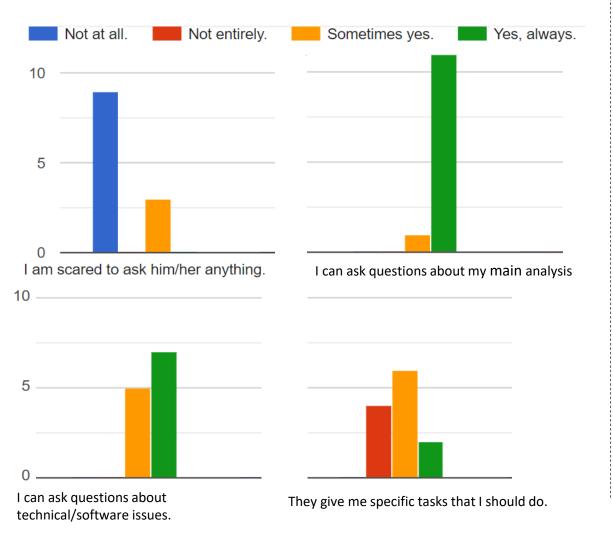
#### PhD student Vs. supervisor

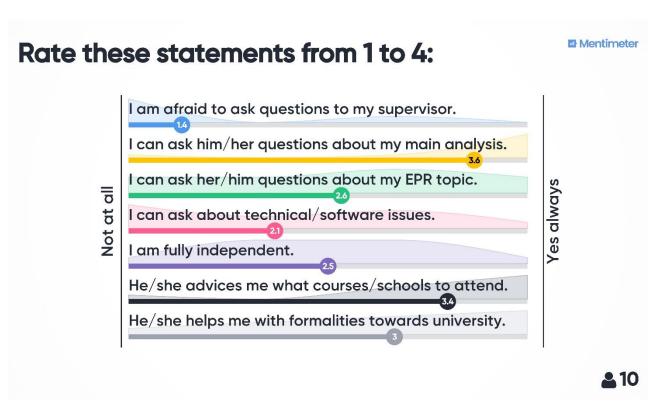
Can you come and ask your supervisor for help whenever you need it? (during office hours)





PhD student Vs. supervisor





PhD student Vs. supervisor

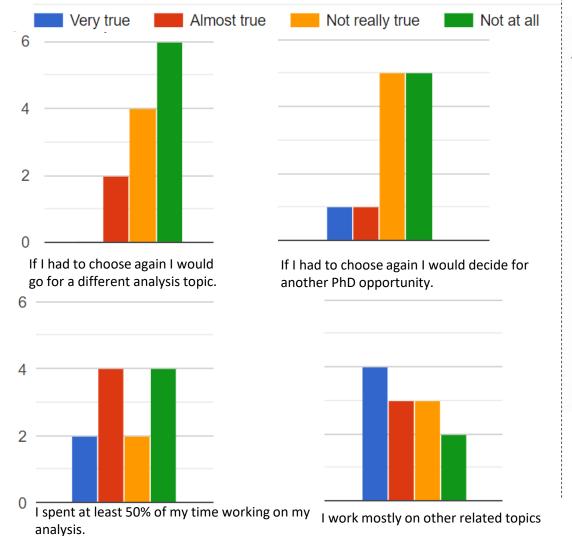
# Describe your relationship with your supervisor in 3 words:

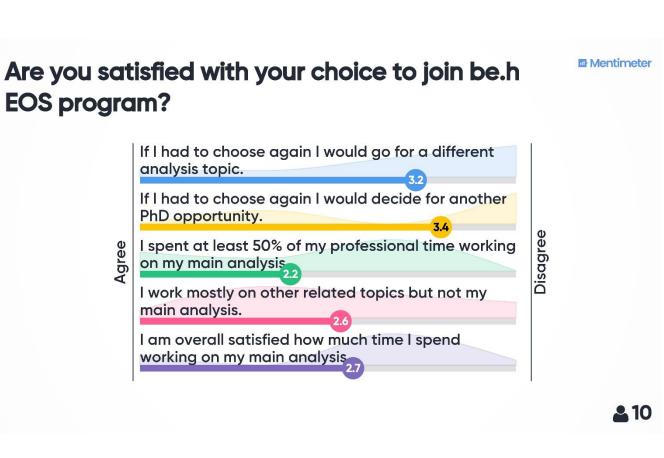




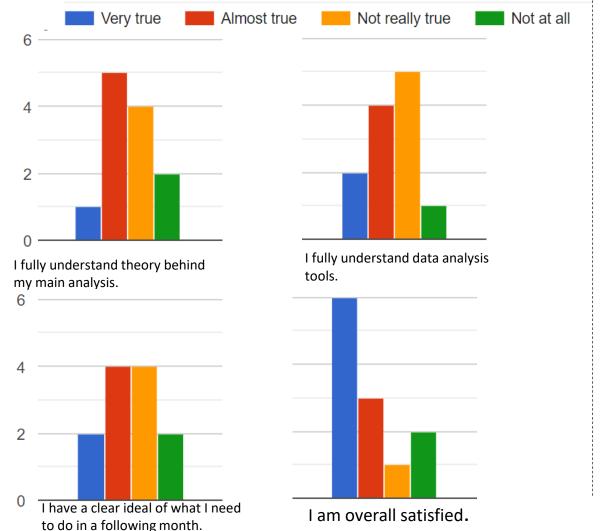
**\$10** 

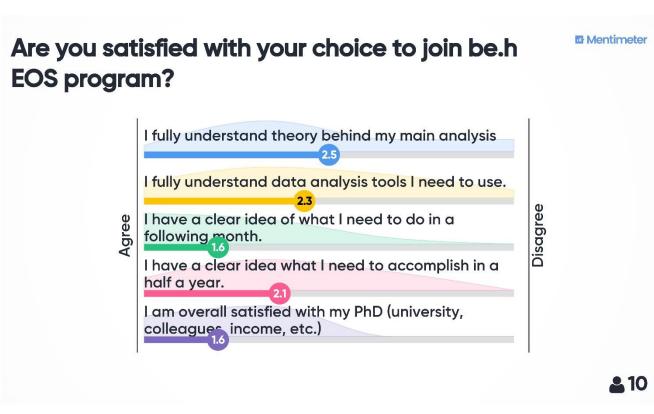
PhD student Vs. analysis





PhD student Vs. analysis

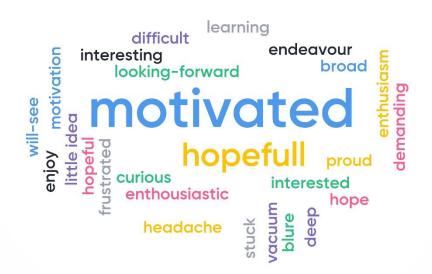




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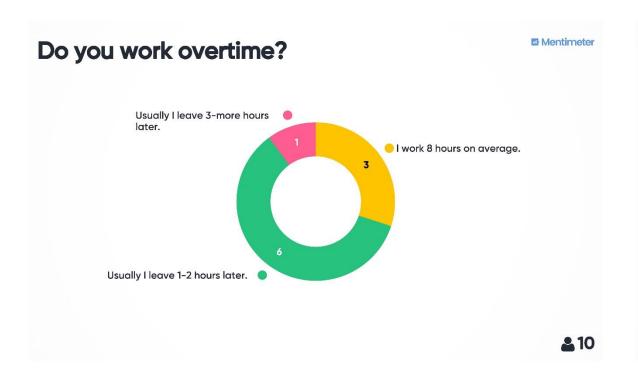
PhD student Vs. analysis

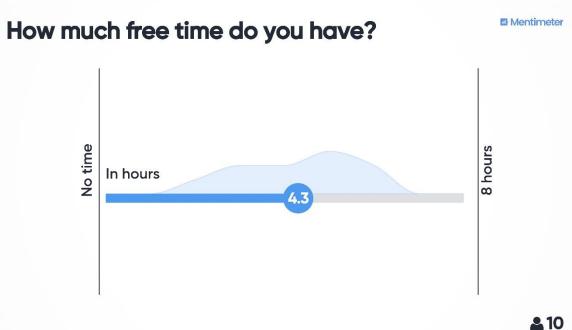
# Describe your attitude towards your main analysis in 3 words:





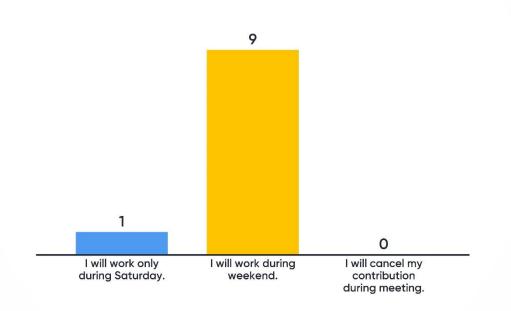
• PhD student Vs. free time



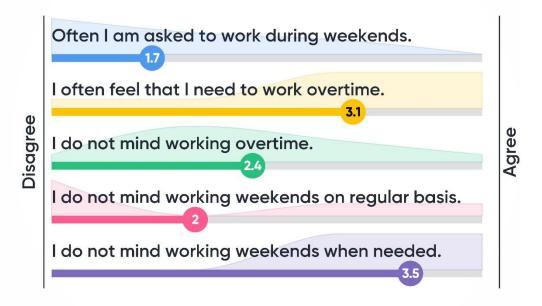


PhD student Vs. free time

There is a meeting on Monday. You can't make it on time....



#### Working too much?



### Summary

#### EoS PhD Days 2019

- Overall successful PhD Days, however still a lot to improve
- Expected more help in organization both from other PhDs and management
- Presence of senior researchers and professors on the first day (dedicated to presentations, feedback and discussion) was minimal (thank you to those who came!)
- Fruitful discussion of new plans and activities

#### **Survey results**

- Hope to address right people and show that we all (students) are sharing the same problems
- Not too much has changed compared to the first survey
- Next survey to be carried out around summer/autumn