Jets and their substructure from LHC data

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Welcome



JETS AND THEIR SUBSTRUCTURE FROM LHC DATA

31 May 2021 to 4 June 2021 CERN

Europe/Zurich timezone

Enter your search term

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Overview

Registration

Call for Abstracts

Timetable

Participant List

Videoconference Rooms

This CERN-TH workshop will be held virtually on ZOOM between 31 May - 4 Jun. We invite you to register through the menu item on the left. The workshop will involve a mixed audience of experimentalists and theorists, with a particular emphasis on phenomenology and the open challenges in jet physics at the LHC. The main programme will take place in the early afternoon and topical discussion sessions will be organised both in the morning and in the late afternoon. In order to foster lively discussions, we wish to accommodate 2-3 short talks (10-15mins) in each discussion session. We encourage participants, especially young researchers, to submit their abstract using the form via the "Call for Abstracts" menu on the left.

List of confirmed speakers:

- Bugra Bilin (Univ. Bruxelles)
- Andy Buckley (Univ. of Glasgow)
- Trisha Farooque (MSU)
- Rhorry Gauld (Nikhef)
- Thomas Gehrmann (UZH)
- Tommaso Giani (Univ. of Edinburgh)
- Lucian Harland-Lang (Univ. of Oxford)
- Andreas Hinzmann (Univ. Hamburg)
- Michael Kagan (SLAC)
- Gregor Kasieczka (Univ. Hamburg)
- Andrew Larkoski (Reed College)
- Ezra Lesser (ALICE, Berkeley)
- Kara Mattioli (LHCb, Univ. of Michigan)
- Ben Nachman (LBNL)
- Duong Hai Nguyen (SUNY)
- Gregory Soyez (IPhT, Saclay)
- Jesse Thaler (MIT)
- Pavel Starovoitov (Univ. Heidelberg)
- Benedikt Maier (CERN)

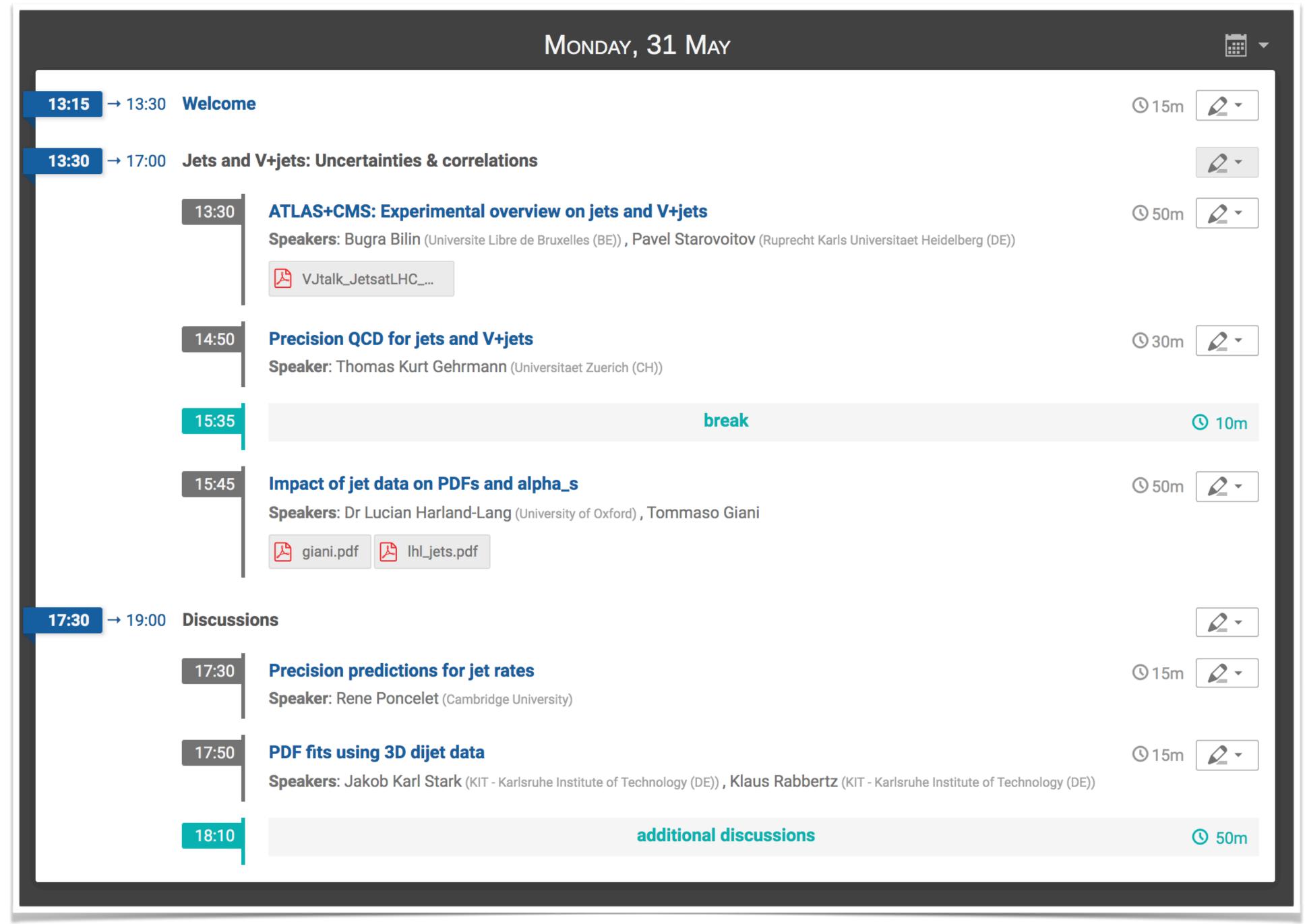
Some logistics

▶ All sessions will take place in this Zoom room

- ▶ Typical schedule involves:
- ▶ Discussion session between 11:00 12:30 CEST with 2 talks/session + discussions
- ▶ Main session between 13:30-17:00 CEST
- ▶ Discussion session between 17:30 19:00 CEST with 2 talks/session + discussions

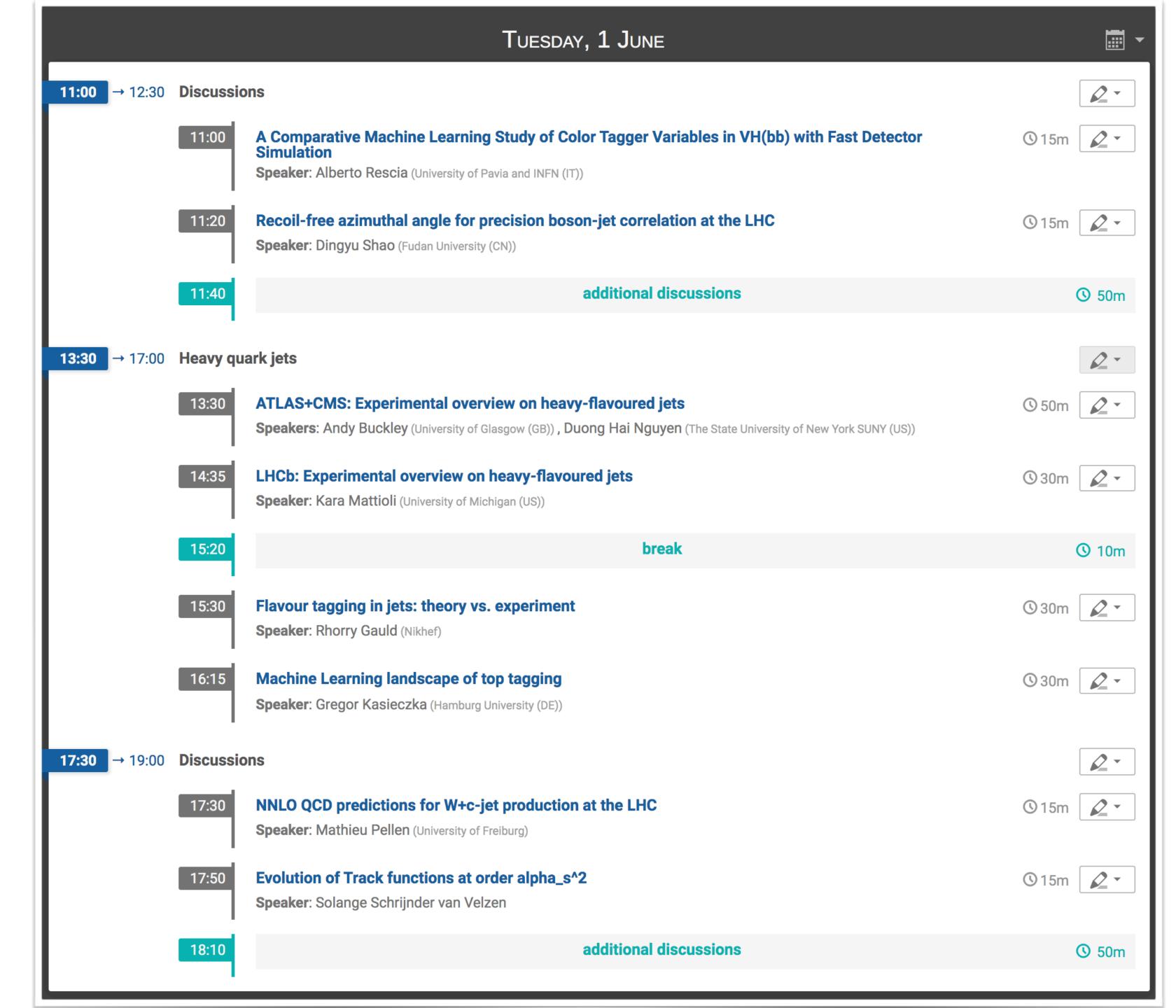
- We encourage all participants to take actively part in the discussions, and to suggest or initiate extra discussions by contacting the organisers either by email or via the Zoom chat
- ▶ Whenever possible, please keep your cameras on during the workshop

Monday: light-jet & V+jets observables in QCD and their uncertainty; impact on α_s and PDFs

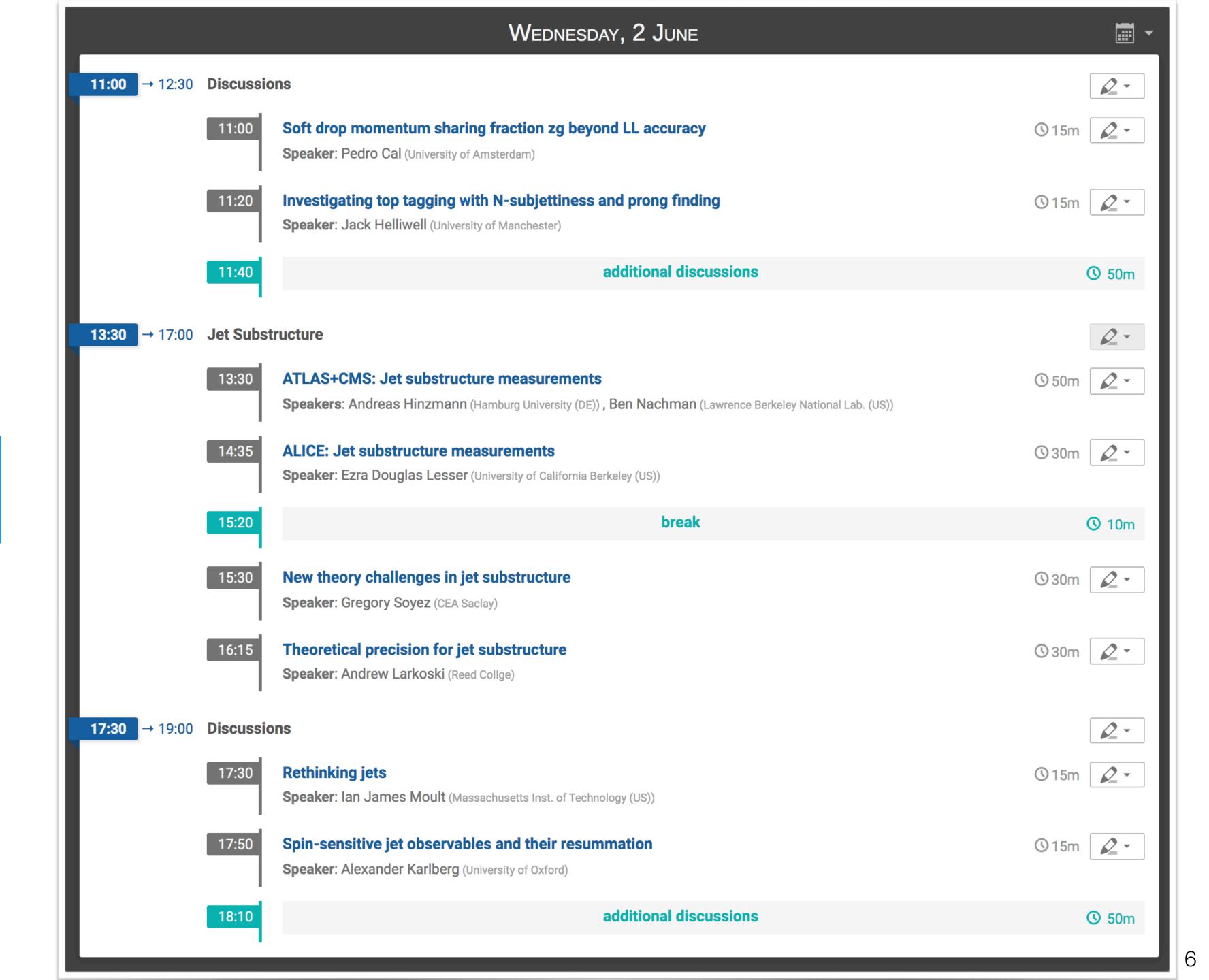


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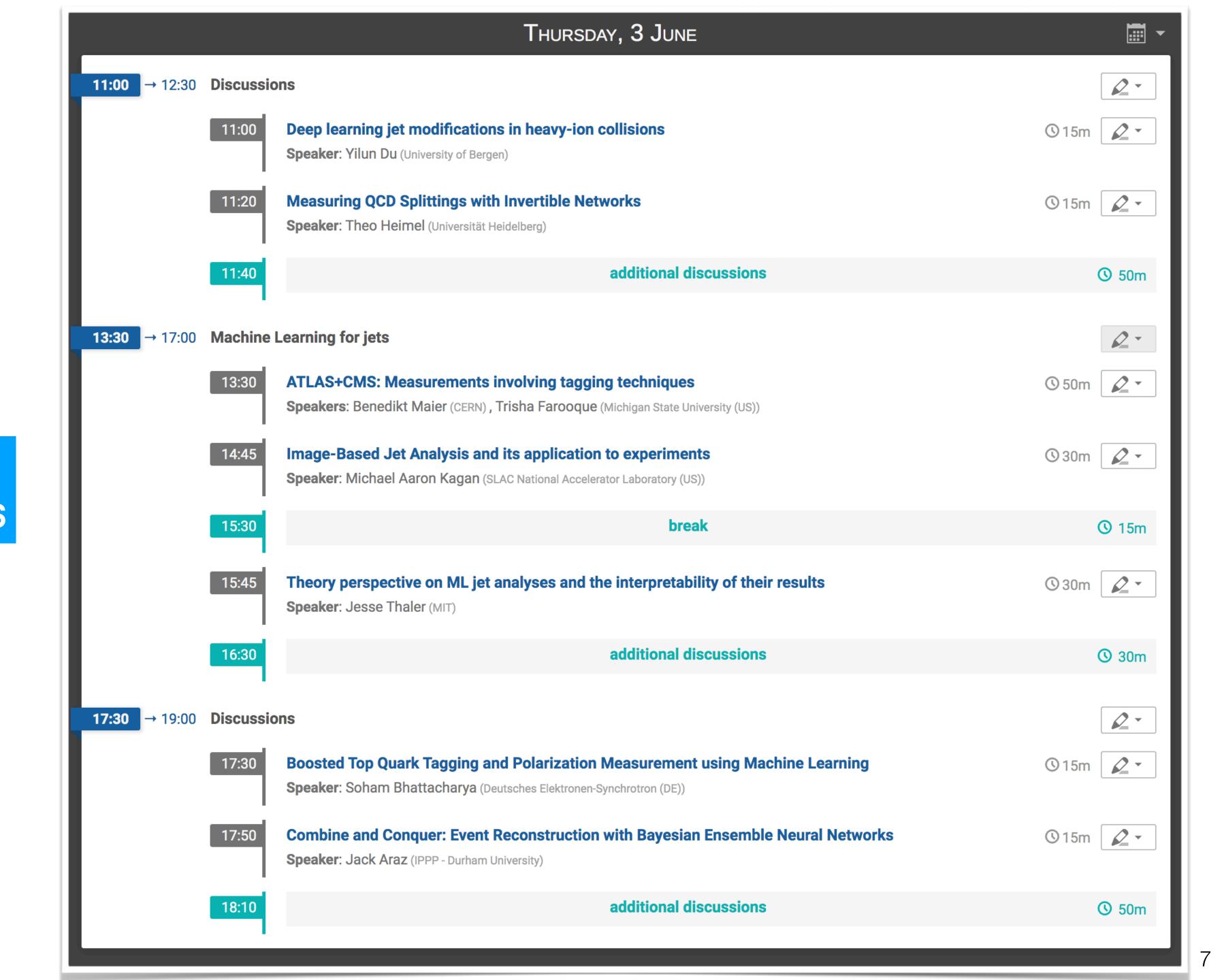
Tuesday: heavy-quark jets (tagging, fragmentation, ...)
& jet substructure



Wednesday: jet substructure (progress in TH & EXP techniques)



Thursday: Machine learning applications & tagging techniques



PhysTeV 2021

Slide by Emanuele Re

- ► The 2021 edition of the PhysTeV workshop (aka "Les Houches") was canceled.
- ➤ Some subjects related to SM phenomenology at the LHC, that are traditionally discussed in Les Houches, will be covered, in a reduced format, through a few virtual meetings.
 - Mon. 14: "TH progress and open issues in SM predictions (jets, V+jets, Higgs, top)"
 - Tue. 15: "SM predictions: EXP needs and wish-list update (jets, V+jets, Higgs, top)"
 - Wed. 16: "Monte Carlo generators and Parton Showers (TH+EXP)"
 - Thu. 17: "open discussions" + "Jet substructure and Machine Learning"
 - [Fri. 18: if needed, time for further discussions]
- You are welcome to register and join the discussions!

Please register

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use the call for abstract to propose ideas for discussions

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when: 14 - 18 June [afternoons CET time]
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- where: https://indico.in2p3.fr/event/24331
- format: short kick-off talks followed by time for open discussion
- If you are interested (even in just one or two sessions), please register to the event.
- Everyone is welcome to suggest ideas for discussions, during or before the meetings (use "Call for Abstracts").

Thank you and enjoy the workshop!