



10.02.2023

Dear all,

This is the final preparatory circular with important information for your Masterclass.

//////// Quiz in the videoconference //////////

Important update! Due of a license change, kahoot cannot be used. Instead, the quiz in the videoconference will be run as a ppt slideshow. Students need answer sheets (download from <http://cern.ch/go/pw9Q>). The updated manual (version from 10.02.2023) for the videoconference is at <http://cern.ch/go/db7q>.

//////// Measurements for IMC 2023 //////////

You will find **all packages and instructions** for 2023 at <http://cern.ch/go/r6Qj>

ATLAS Z path: Find your data at <http://cern.ch/go/RNc8>. Each institute is initially assigned 2 dataset packages with 20 datasets in each package. This means that each institute has a default of 40 datasets available, which is enough to accommodate 80 students. Much more data is available, so please do not hesitate to contact epf-mc@fys.uio.no if you need more.

ATLAS W path: Find your data at <http://cern.ch/go/h6BT>. Each institute has per default one combination spreadsheet; this is enough to accommodate 40 students. If you have more than 40 participants in your Masterclass, please contact uta.bilow@tu-dresden.de.

CMS WZH measurement: Find your data assignments in CIMA, the CMS Instrument for Masterclass Analysis, at <http://cern.ch/go/znV6> and the corresponding event display files in iSpy-webgl at <http://cern.ch/go/tfS9>. Each institute has by default 30-35 data files, each with 100 events, which can accommodate 60-70 students. Please note that CIMA no longer calculates W^+/W^- or e/μ but still supplies the total numbers of each of these particles. It is now left to the students to do the actual calculation of these two ratios. If you need more data or have questions, please contact kcecire@nd.edu.

ALICE strangeness measurement: The data are part of the analysis package, which can be found at <https://alice-web-masterclass.app.cern.ch/home>. The tutors at the institutes create an "event" and "session(s)" for uploading the results and retrieving them at <https://teacher-alice-web-masterclass.app.cern.ch/session>.

MINERvA Neutrino measurement: Find your data assignment with links to files and spreadsheets for recording results at <http://tiny.cc/nudata23>. When students choose their data the event display will come up. Each institute will be assigned one Data Group with 25 “merged tuples”, enough for 50 students. Each merged tuple has 50 events. If you need more data or have questions, please contact swood5@nd.edu.

///// Question time /////

Reminder: If you have questions on the measurements, you can still meet the authors and squeeze.

ATLAS Z: Feb 14 (Tue), 2-3 pm CET <https://indico.cern.ch/event/1251036/>

ATLAS W: Feb 15 (Wed), 4-5 pm CET <https://indico.cern.ch/event/1251032/>

ALICE (Looking for Strange Particles): Feb 13 (Mon), 2-3 pm CET <https://indico.cern.ch/event/1251039/>

Pierre Auger: Feb 13 (Mon), 4-5 pm CET <https://indico.cern.ch/event/1251343/>

MINERvA: Feb 14 (Tue), 4-5 pm CET <https://indico.cern.ch/event/1251058/>

Our good wishes go out today to all those who are working at the International Day of Women and Girls in Science and taking the opportunity for girls to become excited about particle physics!

Kind regards,

Uta + Ken

www.physicsmasterclasses.org/

twitter.com/physicsIMC

twitter.com/lppogOrg

Dr. Uta Bilow
Institute of Nuclear and Particle Physics
Technische Universitaet Dresden
Zellescher Weg 19
01069 Dresden
Germany
Email: uta.bilow@tu-dresden.de
Phone: +49 351 463-32956
Fax: +49 351 463-33114

Kenneth Cecire
QuarkNet National Staff, University of Notre Dame
Department of Physics
225 Nieuwland Science Hall
Notre Dame IN 46556
USA
tel +1-574-631-3343
fax +1-574-631-3977
e-mail kcecire@nd.edu