

Q&A: 2023 CMS Heavy Ion Workshop, May 29-30, 2023

Please provide your comment or question under the appropriate Session/Speaker section below. We encourage you to provide your name, so anyone may follow-up with you if needed. This document will continue to be live and monitored throughout the sessions so that discussion and responses can be provided as soon as possible. If your question does not get answered at the end of the day, we will work to have it answered subsequently. Thank you!

<Locate the Session/Speaker section below>

<Add a new bullet point> enter your first name, last name, email address

Then add your "Comment" or "question": ...

e.g.:

1. Jane Doe

Q:

<answers/comments can be provided below the respective question>

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Main Indico Agenda Page: <https://indico.ectstar.eu/event/181/timetable/>

Sections (you can click on session link below to take you to the appropriate section):

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Introductory/welcome Talks

ECT* Director, Gert Aarts

Goals of the Workshop, Organizers

Session : Initial state and global analysis of nuclear modifications of the parton distributions

Date/Time: May 29, 2023, 09:15 - 10:40 CET

Session Chair: Ben Kilminster

Theory considerations, Tomáš Ježo

- Yi Chen
 - How important is the uncertainty correlation in PDF fits? Are there some studies in the PDF land about the effect of including vs not-including these correlations? I'm asking mostly to gauge how much we as experiments should push to publish the full correlation matrices

Experimental considerations, Jiayin Sun

- GKK
 - I guess LHCb is supportive for pPb data taking in Run 3?
 - YL: for sure, they requested $>\sim 500$ nb⁻¹ in Run3+4

Discussion

Session : Macroscopic QGP Properties

Date/Time: May 29, 2023, 11:15 - 12:45 CET

Session Chair: Subash Behera

Theory considerations, Wilke van der Schee

- Yi Chen
 - What do you think is the biggest approximation at the moment in the way we do simulations? I.e., if we can improve the way we do things, what do you think is the most pressing to fix (regardless of how difficult it is)?
 - For the WS on page 24, is it spherical nucleus? Or is WS on the constituents per nucleon but nucleon still alpha clusters?

Experimental considerations, Zhenyu Chen

Discussion

Session : Open heavy flavor and quarkonia

Date/Time: May 29, 2023, 14:00 - 15:30 CET

Session Chair: Soohwan Lee

Theory considerations, Jiaxing Zhao

Experimental considerations, Zhenyu Ye

Discussion

Session : QGP tomography

Date/Time: May 29, 2023, 16:00 - 17:30 CET

Session Chair: Leticia Cunqueiro

Theory considerations, Zhong Yang

Experimental considerations, Helena Santos

Discussion

Session : Small size/far-from-equilibrium limit of QGP

Date/Time: May 30, 2023, 09:00 - 10:30 CET

Session Chair: Javier Murillo

Theory considerations, Jasmine Brewer

Experimental considerations, Gian Michele Innocenti

Discussion

Session : Ultraperipheral collisions

Date/Time: May 30, 2023, 11:00 - 12:30 CET

Session Chair: Cristian Baldenegro

Theory considerations, Mariola Klusek-Gawenda

Cristian: What insights do we get from “DPS-like” with two-photon fusion processes?
Can we get a notion of σ_{Eff} like with standard DPS?

Is two-gluon fusion **known** to be small for LbL? (KMR-like process) Is there a way of cross checking these calculations independently?

Experimental considerations, David d'Enterria

Cristian:

Discussion

Session : Joint session: LHC combinations and LHC upgrades for Run 5 and beyond

Date/Time: May 30, 2023, 14:00 - 15:30 CET

Session Chair: Florian Damas

LHC upgrades for Run 5 and beyond, Gian Michele Innocenti, Luciano Musa

LHC combinations, GK Krintiras et al

Discussion

Session : Wrap up discussion

Date/Time: May 30, 2023, 16:00 - 17:30 CET

Session Chair: Organizers

Summary slides, Jing Wang

Discussion