ExtreMe Matter Institute EMMI

EMMI Workshop

Soft photons – the higher orders

May 26, 2025, Heidelberg University

Topics:

- In-depth investigations of recent state-of-the-art higher-order corrections on softphoton production and potential inconsistencies regarding momentum conservation.
- Exploring the potential to test fundamental properties of gauge theories in the soft sector using the LHCf experiment at the LHC, particularly in the most forward rapidity region, with a focus on the upcoming oxygen run in 2025.
- Advancing the conceptual design of an ultra-low p_T forward photon spectrometer with the proposed ALICE 3 Experiment.

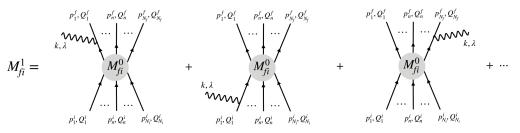


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Organizer:

Kai Schweda (GSI/U Heidelberg, Germany)

Website:
https://indico.gsi.de/event/22295

Information:
www.gsi.de/emmi/workshops

More about EMMI:
www.gsi.de/emmi









Welcome to **41 participants**!

21 in-person 20 via zoom

from theory and experiments world-experts and newcomers

goal

- (1) address soft photon production the higher orders
- (2) explore potential to test fundamental properties of gauge theories in the soft sector by using the LHCf experiment
- (3) Advance design of forward photon spectrometer (FCT) with ALICE 3

Thanks to EMMI for generous support!



ORGANIZATIONAL MATTERS

two coffee breaks (morning and afternoon)

lunch: Bellini (a la carte)

conference dinner: da Claudia,

please sign up which food you'd prefer for your main course

- (1) Sea bass fillet with vegetables and rice
- (2) Lemon veal cutlet with vegetables and croquette
- (3) Pepper sauce veal cutlet with vegetables and croquettes

*We're aware of your preference for vegan or gluten-free options

MOST IMPORTANTLY



Maria Wallner EMMI-Office



Natalie Nicol EMMI-Office



Alexandra Holten Secretariat Johanna Stachel

Thank you so much for your excellent organization of this workshop. You made everything run smoothly and successfully!