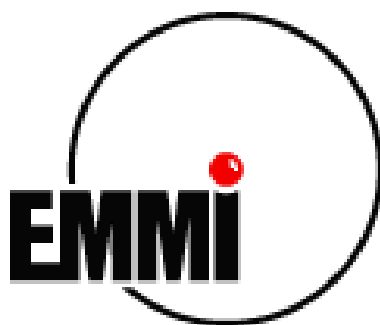


# **New Vistas in Photon Physics in Heavy-Ion Collisions**



## **Report of Contributions**

Contribution ID: 2

Type: **not specified**

## WELCOME

*Tuesday, 20 September 2022 09:00 (15 minutes)*

**Presenters:** Prof. EWERZ, Carlo (Scientific Coordinator of EMMI); Prof. LESIAK, Tadeusz (Institute of Nuclear Physics PAN); Prof. SZAFRAN, Bartłomiej (AGH University of Science and Technology)

**Session Classification:** Day-2

Contribution ID: 3

Type: **not specified**

## **CMS results in photon physics**

*Tuesday, 20 September 2022 09:15 (40 minutes)*

30'+10'(discussion)

**Presenter:** Dr KRINTIRAS, Georgios (The University of Kansas (US))

**Session Classification:** Day-2

Contribution ID: 4

Type: **not specified**

## Recent results from photoproduction in ALICE

*Tuesday, 20 September 2022 09:55 (40 minutes)*

30'+10'(discussion)

**Presenter:** Prof. CONTRERAS NUNO, Jesus Guillermo (Czech Technical University in Prague (CZ))

**Session Classification:** Day-2

Contribution ID: 5

Type: **not specified**

## **Centrality dependent dilepton production and the photon Wigner distribution**

*Tuesday, 20 September 2022 11:05 (30 minutes)*

20'+10'(discussion)

**Presenter:** SCHAEFER, Wolfgang

**Session Classification:** Day-2

Contribution ID: 6

Type: **not specified**

## **The pomeron and photon in ultra-peripheral collisions**

*Tuesday, 20 September 2022 11:35 (30 minutes)*

20'+10'(discussion)

**Presenter:** JENKOVSKY, Laszlo (National Academy of Sciences of Ukraine)

**Session Classification:** Day-2

Contribution ID: 7

Type: **not specified**

## **Alignment of pixel sensors in ATLAS Forward Proton detectors**

*Tuesday, 20 September 2022 12:05 (25 minutes)*

15'+10'(discussion)

**Presenter:** ÖZTÜRK, Ferhat (IFJ PAN Cracow (PL))

**Session Classification:** Day-2

Contribution ID: 8

Type: **not specified**

## **Hadron physics with polarized photon beam at LEPS2**

*Tuesday, 20 September 2022 13:30 (40 minutes)*

30'+10'(discussion)

**Presenter:** RYU, Sun-Young (Osaka University)

**Session Classification:** Day-2



Contribution ID: 9

Type: **not specified**

## **Measurements of the medium radiation in heavy-ion collisions**

*Tuesday, 20 September 2022 14:10 (30 minutes)*

20'+10'(discussion)

**Presenter:** DANISCH, Meike Charlotte (Ruprecht Karls Universitaet Heidelberg (DE))

**Session Classification:** Day-2

Contribution ID: **10**

Type: **not specified**

## **Search for the chiral magnetic effect with isobar collisions**

*Tuesday, 20 September 2022 14:40 (30 minutes)*

20'+10'(discussion) /zoom/

**Presenter:** TRIBEDY, Prithwish (Brookhaven National Lab)

**Session Classification:** Day-2

Contribution ID: 11

Type: **not specified**

## **Electromagnetic interaction of low transverse momentum $e^+/e^-$ with heavy nuclei in ultra-peripheral collisions**

*Tuesday, 20 September 2022 15:40 (30 minutes)*

20'+10'(discussion)

**Presenter:** MAZUREK, Katarzyna (IFJ PAN)

**Session Classification:** Day-2

Contribution ID: 12

Type: **not specified**

## **TRExFitter: A framework for binned template profile likelihood fits in ATLAS**

*Tuesday, 20 September 2022 16:10 (25 minutes)*

15'+10'(discussion)

**Presenter:** MONDAL, Santu (Czech Technical University in Prague (CZ))

**Session Classification:** Day-2

Contribution ID: 13

Type: **not specified**

## **New ATLAS results on photon-pomeron interference in elastic pp scattering**

*Tuesday, 20 September 2022 16:35 (30 minutes)*

20'+10'(discussion)

**Presenter:** STASZEWSKI, Rafał (IFJ PAN Cracow (PL))

**Session Classification:** Day-2

Contribution ID: 14

Type: **not specified**

## POSTER SESSION

**Session Classification:** Day-22

Contribution ID: 15

Type: **not specified**

## **LHCb results in photon physics**

*Wednesday, 21 September 2022 09:00 (40 minutes)*

30'+10'(discussion)

**Presenter:** MCNULTY, Ronan (University College Dublin (IE))

**Session Classification:** Day-3

Contribution ID: 16

Type: **not specified**

## **Exclusive photoproduction of excited vector mesons in the dipole picture**

*Wednesday, 21 September 2022 09:40 (30 minutes)*

20'+10'(discussion)

**Presenter:** PASECHNIK, Roman (Lund university)

**Session Classification:** Day-3



Contribution ID: 17

Type: **not specified**

## **Prompt and non-prompt $J/\psi$ production in Pb-Pb collisions and projections towards UPC**

*Wednesday, 21 September 2022 10:10 (25 minutes)*

15'+10'(discussion)

**Presenter:** Mr SHARMA, Himanshu (Polish Academy of Sciences (PL))

**Session Classification:** Day-3

Contribution ID: **18**

Type: **not specified**

## **Photon physics at ELI-Beamlines user facility**

*Wednesday, 21 September 2022 11:05 (40 minutes)*

30'+10'(discussion)

**Presenter:** GRITTANI, Gabriele Maria (ELI-Beamlines)

**Session Classification:** Day-3

Contribution ID: 19

Type: **not specified**

## **Exclusive lepton pair production at the Electron-Ion Collider - a powerful research tool**

*Wednesday, 21 September 2022 11:45 (30 minutes)*

20'+10'(discussion)

**Presenter:** PRZYBYCIEN, Mariusz (AGH University of Science and Technology (PL))

**Session Classification:** Day-3

Contribution ID: 20

Type: **not specified**

## **Studying radiative charm decays with the LHCb experiment**

*Wednesday, 21 September 2022 12:15 (25 minutes)*

15'+10'(discussion)

**Presenter:** CHERNOV, Aleksei (Polish Academy of Sciences (PL))

**Session Classification:** Day-3

Contribution ID: 21

Type: **not specified**

## **Overview of ATLAS results from ultraperipheral heavy-ion collisions**

*Wednesday, 21 September 2022 13:40 (40 minutes)*

30'+10'(discussion)

**Presenter:** KREMER, Jakub (Johannes Gutenberg Universitaet Mainz (DE))

**Session Classification:** Day-3

Contribution ID: 22

Type: **not specified**

## **Anomalous magnetic and electric dipole moments of tau lepton and spin correlations in $e^+ e^- \rightarrow \tau^+ \tau^-$ reaction**

*Wednesday, 21 September 2022 14:20 (30 minutes)*

20'+10'(discussion)

**Presenter:** Prof. KORCHIN, Alexander (NSC Kharkiv Institute of Physics and Technology, Kharkiv, Ukraine and Institute of Nuclear Physics PAN, Krakow, Poland)

**Session Classification:** Day-3

Contribution ID: 23

Type: **not specified**

## Measuring tau g-2 using ATLAS Pb+Pb collisions

*Wednesday, 21 September 2022 14:50 (30 minutes)*

20'+10'(discussion)

**Presenter:** BERESFORD, Lydia Audrey (CERN)

**Session Classification:** Day-3

Contribution ID: 24

Type: **not specified**

## **Studying TMD gluon distributions in nuclei with photon initiated processes**

*Wednesday, 21 September 2022 15:50 (30 minutes)*

20'+10'(discussion)

**Presenter:** KOTKO, Piotr (AGH UST)

**Session Classification:** Day-3



Contribution ID: 25

Type: **not specified**

## Prospects for testing Low's theorem with ALICE 3

*Wednesday, 21 September 2022 16:20 (30 minutes)*

20'+10'(discussion)

**Presenter:** VOLKL, Martin Andreas (Ruprecht Karls Universitaet Heidelberg (DE))

**Session Classification:** Day-3

Contribution ID: 26

Type: **not specified**

## **Production of $e^+e^-$ in proton-lead collision at LHC energy**

*Wednesday, 21 September 2022 16:50 (25 minutes)*

15'+10'(discussion)

**Presenter:** LINEK, Barbara (University of Rzeszow)

**Session Classification:** Day-3

Contribution ID: 27

Type: **not specified**

## Photon-photon interactions at the EIC and LHeC

*Thursday, 22 September 2022 09:00 (30 minutes)*

20'+10'(discussion) /zoom/

**Presenter:** PIOTRZKOWSKI, Krzysztof (AGH University of Science and Technology (PL))

**Session Classification:** Day-4

Contribution ID: 28

Type: **not specified**

## **LUXE: Investigating non-perturbative QED with Lasers**

*Thursday, 22 September 2022 09:30 (30 minutes)*

20'+10'(discussion)

**Presenter:** SEIPT, Daniel (Lancaster University and The Cockcroft Institute)

**Session Classification:** Day-4

Contribution ID: 29

Type: **not specified**

## **Experimental Prospects at LUXE: a new non-perturbative QED experiment colliding laser pulses and the EUXFEL**

*Thursday, 22 September 2022 10:00 (30 minutes)*

**Presenter:** HALLFORD, John A

**Session Classification:** Day-4

Contribution ID: **30**

Type: **not specified**

## **Thermal Dileptons at very Low Mass and the Electric Conductivity of QCD Matter**

*Thursday, 22 September 2022 11:00 (30 minutes)*

20'+10'(discussion)

**Presenter:** RAPP, Ralf

**Session Classification:** Day-4

Contribution ID: 31

Type: **not specified**

## Discoveries with polarized photons at STAR

*Thursday, 22 September 2022 11:30 (40 minutes)*

30'+10'(discussion)

**Presenter:** Dr BRANDENBURG, James (Brookhaven National Laboratory)

**Session Classification:** Day-4

Contribution ID: 32

Type: **not specified**

## Photons in heavy ion collisions: looking very forward

*Thursday, 22 September 2022 12:10 (30 minutes)*

20'+10'(discussion) /zoom/

**Presenter:** OPPEDISANO, Chiara (Universita e INFN Torino (IT))

**Session Classification:** Day-4



Contribution ID: 33

Type: **not specified**

## **Exclusive diffractive production of photons in proton-proton collisions at the LHC**

*Thursday, 22 September 2022 13:40 (30 minutes)*

20'+10'(discussion)

**Presenter:** LEBIEDOWICZ, Piotr

**Session Classification:** Day-4

Contribution ID: 34

Type: **not specified**

## **Recent ATLAS results on exclusive dielectron and dimuon production in Pb+Pb UPC collisions**

*Thursday, 22 September 2022 14:10 (30 minutes)*

20'+10'(discussion)

**Presenter:** OGRODNIK, Agnieszka Ewa (AGH University of Science and Technology (PL))

**Session Classification:** Day-4

Contribution ID: 35

Type: **not specified**

## Electromagnetic probes in ALICE

*Thursday, 22 September 2022 14:40 (30 minutes)*

20'+10'(discussion)

**Presenter:** SAS, Mike (Yale University (US))

**Session Classification:** Day-4

Contribution ID: 36

Type: **not specified**

## Centrality dependent dilepton production and the photon Wigner distribution

20'+10'(discussion)

**Presenter:** SCHAEFER, Wolfgang

**Session Classification:** Day-22

Contribution ID: 37

Type: **not specified**

## The physics of strong electromagnetic fields

*Monday, 19 September 2022 14:00 (1 hour)*

**Presenter:** KARBSTEIN, Felix (Helmholtz Institute and GSI)

**Session Classification:** Day-1 (Student day)

Contribution ID: **38**

Type: **not specified**

## **Heavy-ion collisions - from initial to final state**

*Monday, 19 September 2022 09:00 (1 hour)*

**Presenter:** WIEDEMANN, Urs (CERN)

**Session Classification:** Day-1 (Student day)

Contribution ID: 39

Type: **not specified**

# Electromagnetic radiation from the Quark-Gluon Plasma

*Monday, 19 September 2022 10:30 (1 hour)*

**Presenter:** RAPP, Ralf

**Session Classification:** Day-1 (Student day)

Contribution ID: 40

Type: **not specified**

## **Electromagnetic effects on charged particles**

*Monday, 19 September 2022 11:30 (1 hour)*

**Presenter:** RYBICKI, Andrzej (Polish Academy of Sciences (PL))

**Session Classification:** Day-1 (Student day)



Contribution ID: 41

Type: **not specified**

## **Dilepton physics opportunities at the LHC**

*Monday, 19 September 2022 15:00 (1 hour)*

**Presenter:** BAILHACHE, Raphaelle (Goethe University Frankfurt (DE))

**Session Classification:** Day-1 (Student day)

Contribution ID: 42

Type: **not specified**

## Generators for photon physics

*Monday, 19 September 2022 16:30 (1 hour)*

**Presenter:** Dr HARLAND-LANG, Lucian (University of Oxford)

**Session Classification:** Day-1 (Student day)