

**Zimányi School 2021**

**Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Opening

*Monday, 6 December 2021 08:50 (3 minutes)*

**Presenter:** LEVAI, Peter (Wigner Research Centre for Physics (Wigner RCP) (HU))

**Session Classification:** Vorticity and Spin

Contribution ID: 2

Type: **not specified**

## Welcome

*Monday, 6 December 2021 08:53 (3 minutes)*

**Presenter:** KATZ, Sandor

**Session Classification:** Vorticity and Spin

Contribution ID: 3

Type: **not specified**

## Searches for chiral anomalies with ALICE

*Monday, 6 December 2021 08:56 (25 minutes)*

**Presenter:** CHRISTAKOGLOU, Panos (Nikhef National institute for subatomic physics (NL))

**Session Classification:** Vorticity and Spin

Contribution ID: 4

Type: **not specified**

## **Spin hydrodynamics: Motivation and Basics**

*Monday, 6 December 2021 09:21 (18 minutes)*

**Presenter:** SINGH, Rajeev (Institute of Nuclear Physics Polish Academy of Sciences)

**Session Classification:** Vorticity and Spin

Contribution ID: 5

Type: **not specified**

## **Helical vortical effects for thermal fermions and polarization asymmetry**

*Monday, 6 December 2021 09:39 (20 minutes)*

**Presenters:** AMBRUS, Victor Eugen (West University of Timisoara (RO)); AMBRUS, Victor Eugen (West University of Timisoara)

**Session Classification:** Vorticity and Spin

Contribution ID: 6

Type: **not specified**

## **Spin polarization dynamics in the non-boost invariant background**

*Monday, 6 December 2021 09:59 (20 minutes)*

**Presenter:** SOPHYS, Gabriel (IFJ PAN)

**Session Classification:** Vorticity and Spin

Contribution ID: 7

Type: **not specified**

## **On measurements of Lambda transverse polarization in p+p interactions within NA61/SHINE at the CERN SPS**

*Monday, 6 December 2021 10:19 (18 minutes)*

**Presenter:** BONDAR, Yehor (Jan Kochanowski University (PL))

**Session Classification:** Vorticity and Spin



Contribution ID: 8

Type: **not specified**

# Dissipative hydrodynamics as a gauge theory

*Monday, 6 December 2021 11:00 (25 minutes)*

**Presenters:** TORRIERI, Giorgio (IFGW, Unicamp); TORRIERI, Giorgio

**Session Classification:** Dissipative Hydrodynamics

Contribution ID: 9

Type: **not specified**

## **Thermodynamics and dissipation in quantum fluids**

*Monday, 6 December 2021 11:25 (25 minutes)*

**Presenter:** VÁN, Peter (Wigner RCP)

**Session Classification:** Dissipative Hydrodynamics

Contribution ID: **10**

Type: **not specified**

## **The controversial fate of super-luminal perturbations**

*Monday, 6 December 2021 12:15 (18 minutes)*

**Presenter:** GAVASSINO, Lorenzo

**Session Classification:** Dissipative Hydrodynamics

Contribution ID: 11

Type: **not specified**

## Neutron star dissipative hydrodynamics

*Monday, 6 December 2021 11:50 (25 minutes)*

**Presenters:** HASKELL, Brynmor (The University of Melbourne); HASKELL, Brynmor (Nicolaus Copernicus Astronomical Center, Polish Academy of Sciences)

**Session Classification:** Dissipative Hydrodynamics

Contribution ID: 12

Type: **not specified**

## **New solutions of non relativistic, viscous hydrodynamics**

*Monday, 6 December 2021 12:33 (18 minutes)*

**Presenter:** KASZA, Gábor (Eötvös Loránd University)

**Session Classification:** Dissipative Hydrodynamics

Contribution ID: 13

Type: **not specified**

## Static quark-antiquark interaction at finite temperature on fine lattices

*Monday, 6 December 2021 14:00 (25 minutes)*

**Presenters:** WEBER, Johannes Heinrich (Munich University of Technology (TUM)); WEBER, Johannes Heinrich (Humboldt University of Berlin)

**Session Classification:** Heavy Flavors

Contribution ID: 14

Type: **not specified**

## **Lattice determination of the heavy quark diffusion constant**

*Monday, 6 December 2021 14:25 (25 minutes)*

**Presenters:** LEINO, Viljami (Technical University of Munich (TUM)); LEINO, Viljami (University of Helsinki); LEINO, Viljami (TuM)

**Session Classification:** Heavy Flavors

Contribution ID: 15

Type: **not specified**

## **J/Psi in jets with CMS**

*Monday, 6 December 2021 14:50 (25 minutes)*

**Presenter:** NGUYEN, Matthew (Centre National de la Recherche Scientifique (FR))

**Session Classification:** Heavy Flavors



Contribution ID: 16

Type: **not specified**

## Monte Carlo simulations of Upsilon Meson production

*Monday, 6 December 2021 15:15 (18 minutes)*

**Presenter:** CESKA, Jakub (Faculty of Nuclear Sciences and Physical Engineering, Czech Tec)

**Session Classification:** Heavy Flavors

Contribution ID: 17

Type: **not specified**

## **Transport properties of the QGP with strange and charm quark quasiparticles**

*Monday, 6 December 2021 15:33 (18 minutes)*

**Presenter:** MYKHAYLOVA, Valeriya

**Session Classification:** Heavy Flavors

Contribution ID: **18**

Type: **not specified**

## **Physics with tagged protons in CMS**

*Monday, 6 December 2021 18:30 (25 minutes)*

**Presenter:** ROYON, Christophe (The University of Kansas (US))

**Session Classification:** Night Shift: Forward Physics and the Odderon

Contribution ID: 19

Type: **not specified**

## **From Elastic Scattering to Central Exclusive Production: Physics with Forward Protons at RHIC**

*Monday, 6 December 2021 18:55 (25 minutes)*

**Presenter:** GURYN, Wlodek (Brookhaven National Laboratory)

**Session Classification:** Night Shift: Forward Physics and the Odderon

Contribution ID: 20

Type: **not specified**

## **Properties of the Odderon as Extracted from Experimental Data - a critical review of recent results**

*Monday, 6 December 2021 19:20 (25 minutes)*

**Presenters:** CSORGO, Tamas (Wigner Research Centre for Physics (Wigner RCP) (HU)); CSORGO, Tamas (Harvard University)

**Session Classification:** Night Shift: Forward Physics and the Odderon

Contribution ID: 21

Type: **not specified**

## **The first experimental observation of odderon exchange**

*Tuesday, 7 December 2021 09:00 (25 minutes)*

**Presenters:** NEMES, Frigyes Janos (CERN (also at Wigner RCP Budapest, Hungary)); NEMES, Frigyes (MTA KFKI)

**Session Classification:** Odderon and Diffraction

Contribution ID: 22

Type: **not specified**

## **H(x) scaling and Levy description of elastic pp and ppbar scattering**

*Tuesday, 7 December 2021 09:25 (25 minutes)*

**Presenters:** STER, Andras (Hungarian Academy of Sciences (HU)); STER, Andras (KFKI-RMKI)

**Session Classification:** Odderon and Diffraction

Contribution ID: 23

Type: **not specified**

## **H(x) scaling and the pp and pbarp slope B(s,t)**

*Tuesday, 7 December 2021 09:50 (18 minutes)*

**Presenters:** SZANYI, Istvan (Hungarian Academy of Sciences (HU)); SZANYI, István (Eötvös Loránd University)

**Session Classification:** Odderon and Diffraction



Contribution ID: 24

Type: **not specified**

## Understanding Neutrino Beams

*Tuesday, 7 December 2021 10:08 (25 minutes)*

**Presenter:** NAGAI, Yoshikazu (Eötvös Loránd University (HU))

**Session Classification:** Odderon and Diffraction

Contribution ID: 25

Type: **not specified**

## Early time dynamics of the QGP

*Tuesday, 7 December 2021 11:00 (25 minutes)*

**Presenter:** SCHLICHTING, Soeren (Universität Bielefeld)

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 26

Type: **not specified**

## **Constraining the initial conditions of heavy-ion collision**

*Tuesday, 7 December 2021 11:25 (20 minutes)*

**Presenters:** ZHOU, You (Niels Bohr Institute (DK)); ZHOU, You (University of Arizona (US))

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 27

Type: **not specified**

## **Difference between flow of protons and antiprotons**

*Tuesday, 7 December 2021 12:30 (20 minutes)*

**Presenters:** STEFANIAK, Maria; STEFANIAK, Maria (Warsaw University Of Technology); STEFANIAK, Maria (Warsaw University of Technology / Subatech)

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 28

Type: **not specified**

## **Anisotropic flow decorrelation in heavy-ion collisions at RHIC-BES energies with 3D event-by-event viscous hydrodynamics**

*Tuesday, 7 December 2021 12:10 (20 minutes)*

**Presenter:** CIMERMAN, Jakub (Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University)

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 29

Type: **not specified**

## **Study of Multiplicity (centrality) Dependent Thermodynamic and Transport Properties at LHC within Color String Percolation Model**

*Friday, 10 December 2021 14:00 (20 minutes)*

**Presenter:** MISHRA, Aditya Nath (Wigner Research Centre for Physics Budapest, Hungary)

**Session Classification:** Jets and QCD

Contribution ID: 30

Type: **not specified**

## **Correspondence between Israel-Stewart and first-order causal and stable hydrodynamics for the boost-invariant flow**

*Tuesday, 7 December 2021 14:25 (25 minutes)*

**Presenters:** DAS, ARPAN (Institute of Nuclear Physics Polish Academy of Sciences Krakow, Poland); DAS, ARPAN (Institute of Physics, Bhubaneswar); DAS, Arpan (Institute of Nuclear Physics Polish Academy of Sciences Krakow )

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 31

Type: **not specified**

## **Linear causality and stability of third-order fluid dynamics**

*Tuesday, 7 December 2021 14:50 (18 minutes)*

**Presenter:** BRITO, Caio (Universidade Federal Fluminense)

**Session Classification:** Hydrodynamics and Transport



Contribution ID: 32

Type: **not specified**

## **A quasiparticle model from a novel Relaxation Time Approximation to the relativistic Boltzmann equation**

*Tuesday, 7 December 2021 15:08 (18 minutes)*

**Presenter:** SOARES ROCHA, Gabriel

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 33

Type: **not specified**

## **Early time anisotropic flow scaling behavior from free-streaming to hydrodynamics**

*Tuesday, 7 December 2021 15:26 (18 minutes)*

**Presenter:** ROCH, Hendrik (Bielefeld University)

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 34

Type: **not specified**

## **Linear transverse flow responses at small and large opacities in conformal kinetic theory**

*Tuesday, 7 December 2021 15:44 (18 minutes)*

**Presenter:** WERTHMANN, Clemens (University of Bielefeld)

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 35

Type: **not specified**

## Particle dynamics in strong electromagnetic fields

*Tuesday, 7 December 2021 16:30 (25 minutes)*

**Presenters:** RAFELSKI, Johann (University of Arizona (US)); RAFELSKI, Johann (University of Arizona)

**Session Classification:** Plasma Dynamics and Other Topics

Contribution ID: 36

Type: **not specified**

## Covariant Linear Response for Collisional Plasmas

*Tuesday, 7 December 2021 16:55 (25 minutes)*

**Presenter:** FORMANEK, Martin (Max Planck Institute for Nuclear Physics, Heidelberg)

**Session Classification:** Plasma Dynamics and Other Topics

Contribution ID: 37

Type: **not specified**

# Electromagnetic Response in QGP in Heavy Ion Collisions

*Tuesday, 7 December 2021 17:20 (18 minutes)*

**Presenter:** GRAYSON, Christopher

**Session Classification:** Plasma Dynamics and Other Topics

Contribution ID: 38

Type: **not specified**

## **$N = 4$ supersymmetric Yang-Mills thermodynamics to order $\lambda^2$**

**Presenter:** TANTARY, Ubaid (Kent State University, Kent, Ohio, USA)

**Session Classification:** Plasma Dynamics and Other Topics

Contribution ID: 39

Type: **not specified**

## How to find a Quantum Pion Liquid in cold, dense QCD

*Tuesday, 7 December 2021 17:38 (25 minutes)*

**Presenter:** PISARSKI, Robert (Brookhaven National Lab.)

**Session Classification:** Plasma Dynamics and Other Topics



Contribution ID: 40

Type: **not specified**

## **Two-particle correlation at the BES program at STAR**

*Wednesday, 8 December 2021 09:00 (25 minutes)*

**Presenter:** ZBROSZCZYK, Hanna (Warsaw University of Technology (PL))

**Session Classification:** Femtoscopy

Contribution ID: 41

Type: **not specified**

## **Bose-Einstein correlations in pPb collisions at LHCb**

*Wednesday, 8 December 2021 09:25 (18 minutes)*

**Presenter:** MALECKI, Bartosz Piotr (Polish Academy of Sciences (PL))

**Session Classification:** Femtoscopy

Contribution ID: 42

Type: **not specified**

## **Non-decay photon HBT analysis in Ag+Ag@1.58 A GeV collisions at the HADES experiment**

*Wednesday, 8 December 2021 09:43 (18 minutes)*

**Presenters:** GRUNWALD, Mateusz (Politechnika Warszawska, Warsaw, Poland); GRUNWALD, Mateusz (Warsaw University of Technology)

**Session Classification:** Femtoscopy

Contribution ID: 43

Type: **not specified**

## **Femtoscscopy of particles with strange quarks**

*Wednesday, 8 December 2021 10:01 (18 minutes)*

**Presenters:** PAWŁOWSKA, Diana (Warsaw University of Technology); PAWŁOWSKA, Diana

**Session Classification:** Femtoscscopy

Contribution ID: 44

Type: **not specified**

## **Emission asymmetry seen by the femtoscopy**

*Wednesday, 8 December 2021 10:19 (18 minutes)*

**Presenter:** SZYMAŃSKI, Paweł

**Session Classification:** Femtoscopy

Contribution ID: 45

Type: **not specified**

## **Symmetric Levy HBT at NA61/SHINE with Ar+Sc**

*Wednesday, 8 December 2021 11:43 (18 minutes)*

**Presenter:** PORFY, Barnabas (Wigner Research Centre for Physics (Wigner RCP) (HU))

**Session Classification:** Femtoscopy and Search for the CEP

Contribution ID: 46

Type: **not specified**

## Investigating the two-particle source function in 200 GeV Au+Au collisions with EPOS

*Wednesday, 8 December 2021 11:25 (18 minutes)*

**Presenters:** KINCSES, Dániel (Eötvös Loránd University); KINCSES, Dániel (Eötvös Loránd University Budapest)

**Session Classification:** Femtoscopy and Search for the CEP

Contribution ID: 47

Type: **not specified**

## **System size and energy dependence of strangeness production from NA61/SHINE at the CERN SPS**

*Wednesday, 8 December 2021 12:01 (18 minutes)*

**Presenters:** PANOVA, Oleksandra; PANOVA, Oleksandra (Jan Kochanowski University (PL))

**Session Classification:** Femtoscopy and Search for the CEP



Contribution ID: 48

Type: **not specified**

## **Search for critical point of strongly interacting matter by the NA61/SHINE at CERN SPS**

*Wednesday, 8 December 2021 12:19 (18 minutes)*

**Presenter:** ADHIKARY, Haradhan (Jan Kochanowski University (PL))

**Session Classification:** Femtoscopy and Search for the CEP

Contribution ID: 49

Type: **not specified**

## **Exploring dense nuclear matter in heavy-ion collisions at FAIR/NICA energies**

*Wednesday, 8 December 2021 14:00 (25 minutes)*

**Presenter:** SENGER, Peter (GSI)

**Session Classification:** Phase Diagram and Compact Stars

Contribution ID: 50

Type: **not specified**

## Quark-hadron continuity for neutron stars

*Wednesday, 8 December 2021 14:25 (25 minutes)*

**Presenter:** KOJO, Toru (Central China Normal University)

**Session Classification:** Phase Diagram and Compact Stars

Contribution ID: 51

Type: **not specified**

## **Constraining quark matter inside hybrid stars**

*Wednesday, 8 December 2021 14:50 (18 minutes)*

**Presenters:** TAKÁTSY, János (Wigner RCP); TAKÁTSY, János (Wigner Research Centre for Physics)

**Session Classification:** Phase Diagram and Compact Stars

Contribution ID: 52

Type: **not specified**

## **Radial and axial non-radial oscillation modes of isolated compact stars**

*Wednesday, 8 December 2021 15:08 (20 minutes)*

**Presenter:** BARTA, Dániel (Wigner RCP)

**Session Classification:** Phase Diagram and Compact Stars

Contribution ID: 53

Type: **not specified**

## **Probing strongly interacting matter properties with compact stars**

*Wednesday, 8 December 2021 15:28 (18 minutes)*

**Presenter:** GIANGRANDI, Edoardo (University of Coimbra, Coimbra, Portugal)

**Session Classification:** Phase Diagram and Compact Stars

Contribution ID: 54

Type: **not specified**

## **Advancements in the Einstein Telescope project**

*Wednesday, 8 December 2021 15:46 (20 minutes)*

**Presenter:** KOVACS, Robert (Hungarian Academy Database (AAT))

**Session Classification:** Phase Diagram and Compact Stars

Contribution ID: 55

Type: **not specified**

## **Search for the Chiral Magnetic Effect with isobar collisions**

*Wednesday, 8 December 2021 16:35 (25 minutes)*

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

**Session Classification:** Vorticity, Chirality, Polarization



Contribution ID: 56

Type: **not specified**

## **Interpretation of Lambda polarisation measurements**

*Wednesday, 8 December 2021 17:00 (25 minutes)*

**Presenter:** FLORKOWSKI, Wojciech (Jagiellonian University)

**Session Classification:** Vorticity, Chirality, Polarization

Contribution ID: 57

Type: **not specified**

## **Kinetic theory for massive spin-1 particles in electromagnetic fields**

*Wednesday, 8 December 2021 17:25 (18 minutes)*

**Presenter:** WAGNER, David (Institute for Theoretical Physics, Goethe University, Frankfurt, Germany)

**Session Classification:** Vorticity, Chirality, Polarization

Contribution ID: 58

Type: **not specified**

## **Generalized Framework: Canonical Dissipative Spin Hydrodynamics**

*Wednesday, 8 December 2021 17:43 (18 minutes)*

**Presenter:** DAHER, Asaad (IFJ PAN, Krakow, Poland)

**Session Classification:** Vorticity, Chirality, Polarization

Contribution ID: 59

Type: **not specified**

## **Polarization effects at finite temperature and magnetic field**

*Wednesday, 8 December 2021 18:01 (18 minutes)*

**Presenter:** SZYMANSKI, Michal (University of Wroclaw)

**Session Classification:** Vorticity, Chirality, Polarization

Contribution ID: **60**

Type: **not specified**

## **Angular correlations of particle yield ratios (poster)**

*Wednesday, 8 December 2021 18:20 (1h 40m)*

**Presenter:** PETROV, Vitalii (St Petersburg State University (RU))

**Session Classification:** Posters and Wine

Contribution ID: **61**

Type: **not specified**

## **Phenomenology of the Tensor Mesons (poster)**

*Wednesday, 8 December 2021 18:20 (1h 40m)*

**Presenters:** JAFARZADE, SHAHRIYAR (Jan Kochanowski University of Kielce, Poland); JAFARZADE, Shahriyar (CERN)

**Session Classification:** Posters and Wine

Contribution ID: 62

Type: **not specified**

## **Effect of an expanding charge cloud on two-particle Bose-Einstein correlations (poster)**

*Wednesday, 8 December 2021 18:20 (1h 40m)*

**Presenter:** MOHAMMED, Hemida (Fayoum University (EG))

**Session Classification:** Posters and Wine

Contribution ID: 63

Type: **not specified**

## What have we really learned about QGP droplets?

*Thursday, 9 December 2021 14:00 (45 minutes)*

**Presenter:** NAGLE, James Lawrence (University of Colorado Boulder)

**Session Classification:** Ortway Colloquium



Contribution ID: 64

Type: **not specified**

## Femtoscapy in CBM

*Wednesday, 8 December 2021 11:00 (25 minutes)*

**Presenters:** WIELANEK, Daniel Henryk (Warsaw University of Technology (PL)); WIELANEK, Daniel (Warsaw University of Technology)

**Session Classification:** Femtoscapy and Search for the CEP

Contribution ID: 65

Type: **not specified**

## **Measuring pseudorapidity densities with the STAR EPD**

**Presenter:** CSANAD, Mate (Eotvos University, Budapest)

**Session Classification:** Posters and Wine

Contribution ID: 66

Type: **not specified**

## **Chiral criticality and the role of repulsive interactions in hot hadronic matter**

*Thursday, 9 December 2021 09:00 (25 minutes)*

**Presenters:** MARCZENKO, Michał; MARCZENKO, Michał (University of Wrocław)

**Session Classification:** QCD and Hadronization

Contribution ID: 67

Type: **not specified**

## **Instabilities in Classical Chromodynamics**

*Thursday, 9 December 2021 09:25 (18 minutes)*

**Presenter:** BAZAK, Sylwia (Jan Kochanowski University)

**Session Classification:** QCD and Hadronization

Contribution ID: 68

Type: **not specified**

## **Initial conditions for hydrodynamic simulations of collisions at RHIC-BES energies**

*Thursday, 9 December 2021 10:19 (18 minutes)*

**Presenter:** STERBA, Jakub (Czech Technical University, Prague, Czech Republic)

**Session Classification:** QCD and Hadronization

Contribution ID: 69

Type: **not specified**

## **One-loop HTL thermodynamics of magnetized QCD matter**

*Thursday, 9 December 2021 10:01 (18 minutes)*

**Presenter:** KARMAKAR, Bithika (Saha Institute of Nuclear Physics, Kolkata, India)

**Session Classification:** QCD and Hadronization

Contribution ID: 70

Type: **not specified**

## **Impact of hadronisation process and hadronic cascades on the 2nd order susceptibilities studied through the BES with EPOS 4**

*Thursday, 9 December 2021 09:43 (18 minutes)*

**Presenter:** JAHAN, Johannes (Subatech (FR))

**Session Classification:** QCD and Hadronization

Contribution ID: 71

Type: **not specified**

## Scattering theory and thermodynamics

*Thursday, 9 December 2021 11:00 (25 minutes)*

**Presenter:** LO, Pok Man (University of Wroclaw)

**Session Classification:** Effective Theories and Transport



Contribution ID: 72

Type: **not specified**

# Non-Equilibrium Transport of Conserved Charges in High-Energy Heavy Ion Collisions

*Thursday, 9 December 2021 11:25 (18 minutes)*

**Presenter:** PLASCHKE, Philip (Bielefeld University)

**Session Classification:** Effective Theories and Transport

Contribution ID: 73

Type: **not specified**

# Thermal dileptons in Coarse-Grained Transport and Hydrodynamics

*Thursday, 9 December 2021 11:43 (18 minutes)*

**Presenter:** WIEST, Maximilian (Institute for Nuclear Physics, Technical University of Darmstadt, Darmstadt, Germany)

**Session Classification:** Effective Theories and Transport

Contribution ID: 74

Type: **not specified**

## **Finite volume effects via low momentum cutoff in the ELSM**

*Thursday, 9 December 2021 12:01 (18 minutes)*

**Presenter:** KOVÁCS, Győző (Wigner RCP)

**Session Classification:** Effective Theories and Transport

Contribution ID: 75

Type: **not specified**

## Anti-nuclei production at ALICE

*Thursday, 9 December 2021 12:19 (25 minutes)*

**Presenter:** PINTO, Chiara (Technische Universitaet Muenchen (DE))

**Session Classification:** Effective Theories and Transport

Contribution ID: 76

Type: **not specified**

## **Tracing the emergence of collectivity in the small systems**

*Thursday, 9 December 2021 15:00 (25 minutes)*

**Presenter:** SINGH, Pragya (University of Bielefeld)

**Session Classification:** Small and Very Small Systems

Contribution ID: 77

Type: **not specified**

# Glueball glueball scattering and the Glueballonium

*Thursday, 9 December 2021 15:25 (18 minutes)*

**Presenter:** TROTTI, Enrico

**Session Classification:** Small and Very Small Systems

Contribution ID: 78

Type: **not specified**

## Diphoton production in heavy-ion UPC

*Thursday, 9 December 2021 15:43 (18 minutes)*

**Presenters:** KLUSEK-GAWENDA, Mariola (Institute of Nuclear Physics Polish Academy of Sciences); KLUSEK-GAWENDA, Mariola (IFJ PAS)

**Session Classification:** Small and Very Small Systems

Contribution ID: 79

Type: **not specified**

## **Feasibility studies of charge exchange measurements in pp collisions**

*Thursday, 9 December 2021 16:01 (18 minutes)*

**Presenter:** FEHERKUTI, Anna (Eotvos Lorand University (HU))

**Session Classification:** Small and Very Small Systems



Contribution ID: **80**

Type: **not specified**

## **Validation of Glauber model for centrality determination in small system collisions**

*Thursday, 9 December 2021 16:19 (18 minutes)*

**Presenter:** RAMASUBRAMANIAN, Niveditha (Stony Brook University)

**Session Classification:** Small and Very Small Systems

Contribution ID: **81**

Type: **not specified**

## **Inclusive and heavy-flavor jet substructure measurements with ALICE**

*Thursday, 9 December 2021 17:15 (25 minutes)*

**Presenter:** VERTESI, Robert (Wigner Research Centre for Physics (Wigner RCP) (HU))

**Session Classification:** Heavy Flavors

Contribution ID: 82

Type: **not specified**

## **Production of heavy-flavoured mesons and jets in dependence on Underlying Event activity**

*Thursday, 9 December 2021 17:40 (18 minutes)*

**Presenter:** GYULAI, Laszlo (Wigner Research Centre for Physics (Wigner RCP) (HU))

**Session Classification:** Heavy Flavors

Contribution ID: 83

Type: **not specified**

## **Event-activity-dependent production of charmed baryons at LHC energies**

*Thursday, 9 December 2021 17:58 (18 minutes)*

**Presenters:** VARGA, Zoltan (Wigner Research Centre for Physics (Wigner RCP) (HU)); VARGA, Zoltán

**Session Classification:** Heavy Flavors

Contribution ID: 84

Type: **not specified**

## Enhanced production of charmed $\Lambda_c$ , $\Sigma_c$ and $\Xi_c$ baryons in simulations

*Thursday, 9 December 2021 18:16 (18 minutes)*

**Presenter:** MISAK, Anett (Wigner Research Centre for Physics (Wigner RCP) (HU))

**Session Classification:** Heavy Flavors

Contribution ID: 85

Type: **not specified**

# Heavy-flavour measurements with the ALICE experiment

*Thursday, 9 December 2021 18:34 (18 minutes)*

**Presenter:** FRAJNA, Eszter (Wigner Research Centre for Physics (Wigner RCP) (HU))

**Session Classification:** Heavy Flavors

Contribution ID: 86

Type: **not specified**

# Heavy-flavour hadron production as a function of charged-particle multiplicity measured by ALICE

*Thursday, 9 December 2021 18:52 (18 minutes)*

**Presenters:** MDHLULI, Joy; MDHLULI, Joyful Elma (University of the Witwatersrand (ZA))

**Session Classification:** Heavy Flavors

Contribution ID: 87

Type: **not specified**

## **QCD thermodynamics at finite baryon density from lattice simulations**

*Friday, 10 December 2021 09:00 (25 minutes)*

**Presenter:** PASZTOR, Attila (Eötvös University)

**Session Classification:** QCD



Contribution ID: **88**

Type: **not specified**

## **Corrections to the hadron resonance gas from lattice QCD and their effect on fluctuation-ratios at finite density**

*Friday, 10 December 2021 09:25 (18 minutes)*

**Presenter:** PESZNYAK, David

**Session Classification:** QCD

Contribution ID: 89

Type: **not specified**

## **Pressure contribution of bound states and resonances at nonzero $T$**

*Friday, 10 December 2021 09:43 (25 minutes)*

**Presenter:** GIACOSA, Francesco (Kielce University)

**Session Classification:** QCD

Contribution ID: **90**

Type: **not specified**

## **Theta-QCD= $\pi$ at 133.8 MeV in the Big Bang**

*Friday, 10 December 2021 10:08 (20 minutes)*

**Presenter:** BRAY-ALI, Noah (Mount Saint Mary's University, Los Angeles, USA)

**Session Classification:** QCD

Contribution ID: **91**

Type: **not specified**

# The ALICE Fast Interaction Trigger Upgrade

*Friday, 10 December 2021 11:00 (20 minutes)*

**Presenter:** LOKOS, Sandor (Institute of Nuclear Physics Polish Academy of Sciences (PL))

**Session Classification:** Detector Development and Jets

Contribution ID: 92

Type: **not specified**

# Application of a statistically based, iterative image reconstruction algorithm for proton Computed Tomography

*Friday, 10 December 2021 11:20 (18 minutes)*

**Presenter:** SUDAR, Akos (Wigner Research Centre for Physics (Wigner RCP) (HU))

**Session Classification:** Detector Development and Jets

Contribution ID: 93

Type: **not specified**

## **Status and prospect of the ALICE Inner Tracking System**

*Friday, 10 December 2021 11:38 (18 minutes)*

**Presenter:** ISAKOV, Artem (Czech Academy of Sciences (CZ))

**Session Classification:** Detector Development and Jets

Contribution ID: 94

Type: **not specified**

## **Studying hadronization with Machine Learning techniques and event variables**

*Friday, 10 December 2021 11:56 (20 minutes)*

**Presenter:** BIRO, Gabor (Wigner Research Centre for Physics (Wigner RCP) (HU))

**Session Classification:** Detector Development and Jets

Contribution ID: 95

Type: **not specified**

## **Implementation of machine learning tools in heavy-ion collisions at the LHC**

*Friday, 10 December 2021 12:16 (18 minutes)*

**Presenters:** MALLICK, Neelkamal (Indian Institute of Technology, Indore); MALLICK, Neelkamal (Indian Institute of Technology Indore)

**Session Classification:** Detector Development and Jets



Contribution ID: 96

Type: **not specified**

## Quantifying the Underlying Event

*Tuesday, 7 December 2021 11:45 (25 minutes)*

**Presenters:** BARNAFOLDI, Gergely (Hungarian Academy of Sciences (HU)); BARNAFOLDI, Gergely (Hungarian Academy of Sciences (HU)); BARNAFOLDI, Gergely Gabor (Wigner RCP Hungarian Academy of Sciences (HU))

**Session Classification:** Hydrodynamics and Transport

Contribution ID: 97

Type: **not specified**

## **Coupling jets to hydro: multiple scatterings and temperature gradients**

*Friday, 10 December 2021 14:20 (20 minutes)*

**Presenters:** BARATA, Joao; BARATA, João

**Session Classification:** Jets and QCD

Contribution ID: 98

Type: **not specified**

## **Dynamically groomed jet radius in heavy-ion collisions**

*Friday, 10 December 2021 14:40 (18 minutes)*

**Presenter:** TAKACS, Adam (University of Bergen)

**Session Classification:** Jets and QCD

Contribution ID: 99

Type: **not specified**

## **Higher Order Corrections to Transverse Momentum Broadening in a Weakly Coupled Quark Gluon Plasma**

*Friday, 10 December 2021 14:58 (18 minutes)*

**Presenter:** WEITZ, Eamonn (Subatech, Nantes, France)

**Session Classification:** Jets and QCD

Contribution ID: **100**

Type: **not specified**

# Exploring jet transport coefficients in the strongly interacting quark-gluon plasma

*Friday, 10 December 2021 15:16 (18 minutes)*

**Presenter:** GRISHMANOVSKII, Ilia (ITP, Frankfurt, Germany)

**Session Classification:** Jets and QCD

Contribution ID: **101**

Type: **not specified**

## **Jet transport coefficient $\hat{q}$ in lattice QCD**

*Friday, 10 December 2021 15:34 (20 minutes)*

**Presenters:** KUMAR, Amit (McGill University, Montreal, Canada); KUMAR, Amit

**Session Classification:** Jets and QCD

Contribution ID: **102**

Type: **not specified**

## **Introduction to Intermediate energies and EoS research**

*Friday, 10 December 2021 16:30 (15 minutes)*

**Presenters:** VERDE, Giuseppe (INFN); VERDE, Giuseppe (INFN, Sezione di Catania)

**Session Classification:** Intermediate Energies

Contribution ID: **103**

Type: **not specified**

## **The nuclear equation of state: from experiments to astrophysical observations**

*Friday, 10 December 2021 16:45 (25 minutes)*

**Presenter:** VIDANA, Isaac (University of Coimbra)

**Session Classification:** Intermediate Energies



Contribution ID: 104

Type: **not specified**

## **Time-resolved equilibration: how to measure the motion of protons and neutrons on a sub-zeptosecond timeframe**

*Friday, 10 December 2021 17:10 (25 minutes)*

**Presenter:** Dr MCINTOSH, Alan (Texas A&M University Cyclotron Institute, College Station, Texas, USA)

**Session Classification:** Intermediate Energies

Contribution ID: **105**

Type: **not specified**

## **EoS and symmetry energy experimental studies at GSI/FAIR energies**

*Friday, 10 December 2021 17:35 (25 minutes)*

**Presenter:** RUSSOTTO, Paolo (INFN - National Institute for Nuclear Physics)

**Session Classification:** Intermediate Energies

Contribution ID: **106**

Type: **not specified**

## **Symmetry energy studied with INDRA-FAZIA at GANIL**

*Friday, 10 December 2021 18:00 (25 minutes)*

**Presenter:** Dr FABLE, Quentin (L2IT, Toulouse, France)

**Session Classification:** Intermediate Energies

Contribution ID: **107**

Type: **not specified**

## Partial chemical equilibrium

*Tuesday, 7 December 2021 14:00 (25 minutes)*

**Presenters:** TOMASIK, Boris (Univerzita Mateja Bela); TOMASIK, Boris (Univerzita Mateja Bela (SK))

**Session Classification:** Hydrodynamics and Transport

Contribution ID: **108**

Type: **not specified**

## **Normal and anomalous transport in large and small collision-systems**

*Monday, 6 December 2021 16:20 (25 minutes)*

**Presenters:** LACEY, Roy Alphanso (Stony brook Universty (US)); LACEY, Roy (Stony Brook University)

**Session Classification:** Hydro, Transport, Centrality

Contribution ID: **109**

Type: **not specified**

## **Effects of subnucleon structure in small and large collision systems**

*Monday, 6 December 2021 16:45 (25 minutes)*

**Presenter:** SCHENKE, Bjoern (Brookhaven National Lab)

**Session Classification:** Hydro, Transport, Centrality

Contribution ID: **110**

Type: **not specified**

## **Nuclear shape imaging using hydrodynamics in high-energy heavy-ion collisions**

*Monday, 6 December 2021 17:10 (25 minutes)*

**Presenter:** JIA, Jiangyong (Stony Brook University (US))

**Session Classification:** Hydro, Transport, Centrality

Contribution ID: 111

Type: **not specified**

## **Chiral Magnetic Effect from Anomalous-Viscous Fluid Dynamics simulation framework**

*Monday, 6 December 2021 17:35 (25 minutes)*

**Presenter:** SHI, Shuzhe (McGill University)

**Session Classification:** Hydro, Transport, Centrality



Contribution ID: **112**

Type: **not specified**

## **Conference photo (on Zoom)**

*Wednesday, 8 December 2021 12:37 (1 minute)*

**Session Classification:** Femtoscopy and Search for the CEP

Contribution ID: 113

Type: **not specified**

## Conference photo (on Zoom)

*Wednesday, 8 December 2021 18:19 (1 minute)*

**Session Classification:** Vorticity, Chirality, Polarization