

Light ion collisions at the LHC

Report of Contributions

Contribution ID: 1

Type: **not specified**

Machine: Milestones of the CERN ion injector complex and LHC

Monday 11 November 2024 09:10 (25 minutes)

Presenter: ALEMANY FERNANDEZ, Reyes (CERN)

Session Classification: Introduction

Contribution ID: 2

Type: **not specified**

A Decade of Collectivity in Small Systems

Monday 11 November 2024 09:35 (45 minutes)

Presenter: GROSSE-OETRINGHAUS, Jan Fiete (CERN)

Session Classification: Introduction

Contribution ID: 3

Type: **not specified**

Small systems: ALICE highlights

Monday 11 November 2024 10:50 (25 minutes)

Presenter: CHESHKOV, Cvetan Valeriev (Centre National de la Recherche Scientifique (FR))

Session Classification: Experimental highlights

Contribution ID: 4

Type: **not specified**

Small systems: ATLAS highlights

Monday 11 November 2024 11:15 (25 minutes)

Presenter: DERENDARZ, Dominik Karol (Polish Academy of Sciences (PL))

Session Classification: Experimental highlights

Contribution ID: 5

Type: **not specified**

Small systems: CMS highlights

Monday 11 November 2024 11:40 (25 minutes)

Presenter: CHEN, Zhenyu (Shandong University)

Session Classification: Experimental highlights

Contribution ID: 6

Type: **not specified**

Small systems: LHCb highlights

Monday 11 November 2024 12:05 (25 minutes)

Presenter: BOETTCHER, Thomas (University of Cincinnati (US))

Session Classification: Experimental highlights

Contribution ID: 7

Type: **not specified**

Rationale for light-ion collisions

Monday 11 November 2024 14:15 (25 minutes)

Presenters: GIACALONE, Giuliano; NIJS, Govert Hugo (CERN)

Session Classification: Experimental highlights

Contribution ID: 8

Type: **not specified**

System scan at RHIC with emphasis on small systems

Monday 11 November 2024 14:40 (25 minutes)

Presenter: HUANG, Shengli

Session Classification: Experimental highlights

Contribution ID: 9

Type: **not specified**

System scan at LHC with emphasis on nuclear geometries

Monday 11 November 2024 15:05 (25 minutes)

Presenter: LU, Zhiyong (China Institute of Atomic Energy (CN))

Session Classification: Experimental highlights

Contribution ID: **10**

Type: **not specified**

Panel discussion

Monday 11 November 2024 16:00 (1 hour)

Presenters: DAINESE, Andrea (INFN - Padova (IT)); WIEDEMANN, Urs (CERN)

Contribution ID: 11

Type: **not specified**

nPDFs progress report: EPPS21

Tuesday 12 November 2024 09:00 (25 minutes)

Presenter: PAAKKINEN, Petja

Session Classification: Nuclear Parton Distribution Functions

Contribution ID: 12

Type: **not specified**

Baseline calculations for oxygen and neon isotopes

Tuesday 12 November 2024 10:50 (25 minutes)

Presenter: TAKACS, Adam (Heidelberg University)

Session Classification: Nuclear Parton Distribution Functions

Contribution ID: 17

Type: **not specified**

Panel discussion

Tuesday 12 November 2024 16:00 (1 hour)

Contribution ID: **18**

Type: **not specified**

Applicability of hydrodynamics and role of the initial geometry (1/2)

Wednesday 13 November 2024 09:30 (30 minutes)

Presenter: Prof. SCHLICHTING, Soeren (Universität Bielefeld)

Session Classification: Initial conditions and small systems

Contribution ID: **19**

Type: **not specified**

Precision flow measurements in small systems

Wednesday 13 November 2024 09:00 (30 minutes)

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

Session Classification: Initial conditions and small systems

Contribution ID: 20

Type: **not specified**

Applicability of hydrodynamics and role of the initial geometry (2/2)

Wednesday 13 November 2024 10:00 (20 minutes)

Presenter: WERTHMANN, Clemens (Ghent University)

Session Classification: Initial conditions and small systems

Contribution ID: 21

Type: **not specified**

SMOG2: Status, species available, prospects for collectivity studies

Wednesday 13 November 2024 10:50 (25 minutes)

Presenter: GRAZIANI, Giacomo (INFN, Sezione di Firenze (IT))

Session Classification: Nuclear structure and the LHC

Contribution ID: 22

Type: **not specified**

Nuclear wave functions for HIC: ab initio PGCM

Wednesday 13 November 2024 11:15 (25 minutes)

Presenter: BALLY, Benjamin

Session Classification: Nuclear structure and the LHC

Contribution ID: 23

Type: **not specified**

Nuclear wave functions for HIC: Nuclear Lattice EFT

Wednesday 13 November 2024 11:40 (25 minutes)

Presenter: LU, Bingnan (Graduate School of China Academy of Engineering Physics)

Session Classification: Nuclear structure and the LHC

Contribution ID: 24

Type: **not specified**

Nuclear wave functions for HIC: ab initio NCSM

Wednesday 13 November 2024 12:05 (25 minutes)

Presenter: OTSUKA, Takaharu

Session Classification: Nuclear structure and the LHC

Contribution ID: 25

Type: **not specified**

TH Colloquium: Advances in many-body theory and applications to heavy-ion collisions

Wednesday 13 November 2024 14:00 (1 hour)

Presenter: LEE, Dean

Contribution ID: 26

Type: **not specified**

Hydrodynamic calculations for small systems: status and prospects

Thursday 14 November 2024 09:50 (30 minutes)

Presenter: SONG, Huichao

Session Classification: Hydrodynamics in small systems

Contribution ID: 27

Type: **not specified**

The equation of state from Neutron Stars to Heavy Ion Collisions

Wednesday 13 November 2024 15:30 (30 minutes)

Presenter: Prof. NORONHA-HOSTLER, Jacquelyn (University of Illinois Urbana Champaign)

Session Classification: Hydrodynamics in small systems

Contribution ID: 28

Type: **not specified**

Machine: Achievements of LHC as a high energy ion collider and plans for HL-LHC

Wednesday 13 November 2024 16:00 (30 minutes)

Presenter: Dr BRUCE, Roderik (CERN)

Session Classification: Machine

Contribution ID: 29

Type: **not specified**

Machine: Prospects with light nuclear species (10B, 24Mg, 20Ne)

Thursday 14 November 2024 09:00 (25 minutes)

Presenter: SLUPECKI, Maciej (CERN)

Session Classification: Machine

Contribution ID: **30**

Type: **not specified**

Machine: LHC Oxygen run: preparation status and plans

Thursday 14 November 2024 09:25 (25 minutes)

Presenter: TRIANTAFYLLOU, Natalia (CERN)

Session Classification: Machine

Contribution ID: 34

Type: **not specified**

Experimental constraints on 3D initial conditions in HI and small systems

Thursday 14 November 2024 10:50 (25 minutes)

Presenter: Dr SARKAR, Debojit (Niels Bohr Institute, University of Copenhagen, Denmark)

Session Classification: 3D initial conditions and small systems

Contribution ID: 35

Type: **not specified**

3D models: Glauber modeling across systems and beam energies

Thursday 14 November 2024 11:15 (25 minutes)

Presenter: SHEN, Chun (Wayne State University)

Session Classification: 3D initial conditions and small systems

Contribution ID: **36**

Type: **not specified**

3D models: Saturation-based approaches

Thursday 14 November 2024 11:40 (25 minutes)

Presenter: GARCIA MONTERO, Oscar Jesús

Session Classification: 3D initial conditions and small systems

Contribution ID: 40

Type: **not specified**

Panel Discussion

Thursday 14 November 2024 16:00 (1 hour)

Presenters: ANDRES, Carlota (MIT); Prof. BASS, Steffen A. (Duke University)

Contribution ID: 42

Type: **not specified**

Spectator neutrons and connection with the initial state / nuclear structure

Friday 15 November 2024 09:20 (25 minutes)

Presenter: SELYUZHENKOV, Ilya (GSI, Darmstadt)

Session Classification: Diverse contributions

Contribution ID: 43

Type: **not specified**

NA61/SHINE light-ion physics program

Friday 15 November 2024 09:45 (25 minutes)

Presenter: MACKOWIAK-PAWLOWSKA, Maja (Warsaw University of Technology (PL))

Session Classification: Diverse contributions

Contribution ID: 44

Type: **not specified**

Closing discussion

Friday 15 November 2024 10:40 (1h 30m)

Presenters: GIACALONE, Giuliano; NIJS, Govert Hugo (CERN); Dr VAN DER SCHEE, Wilke (CERN)

Contribution ID: 45

Type: **not specified**

nPDFs progress report: nNNPDF3.0

Tuesday 12 November 2024 09:25 (25 minutes)

Presenter: Dr ROJO, Juan (VU Amsterdam and Nikhef)

Session Classification: Nuclear Parton Distribution Functions

Contribution ID: 46

Type: **not specified**

nPDFs progress report: nCTEQ15HQ

Presenter: KOVARIK, Karol

Session Classification: Nuclear Parton Distribution Functions

Contribution ID: 47

Type: **not specified**

Cosmic rays: XSCRC2024 report

Tuesday 12 November 2024 11:15 (25 minutes)

Presenter: MAURIN, David Alain (Centre National de la Recherche Scientifique (FR))

Session Classification: Cosmic rays and the LHC

Contribution ID: 48

Type: **not specified**

Cosmic rays: Light ion collisions from Monte Carlo generators

Tuesday 12 November 2024 11:40 (25 minutes)

Presenter: RIEHN, Felix (igfae, universidade de santiago de compostela)

Session Classification: Cosmic rays and the LHC

Contribution ID: 49

Type: **not specified**

Experimental overview on heavy flavour modification in small systems

Tuesday 12 November 2024 14:15 (25 minutes)

Presenter: INNOCENTI, Gian Michele (Massachusetts Inst. of Technology (US))

Session Classification: Heavy Flavour in small systems

Contribution ID: 50

Type: **not specified**

Heavy flavor collectivity: transport approach

Tuesday 12 November 2024 14:40 (25 minutes)

Presenter: SAMBATARO, Maria Lucia (Università degli Studi di Catania)

Session Classification: Heavy Flavour in small systems

Contribution ID: 51

Type: **not specified**

Heavy flavor collectivity: hydrodynamic approach

Tuesday 12 November 2024 15:05 (25 minutes)

Presenter: CAPELLINO, Federica (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

Session Classification: Heavy Flavour in small systems

Contribution ID: 53

Type: **not specified**

Nuclear geometry in UPCs

Tuesday 12 November 2024 09:50 (30 minutes)

Presenter: SCHENKE, Bjoern (Brookhaven National Lab)

Session Classification: Nuclear geometry and Ultraperipheral Collisions

Contribution ID: 54

Type: **not specified**

Results on light-ion collisions from the AMPT model

Thursday 14 November 2024 12:05 (25 minutes)

Presenter: ZHAO, Xinli (University of Shanghai for Science and Technology)

Session Classification: Hydrodynamics in small systems

Contribution ID: 55

Type: **not specified**

Jet modification in small systems

Thursday 14 November 2024 14:00 (25 minutes)

Presenter: BALDENEGRO, Cristian (Massachusetts Inst. of Technology (US))

Session Classification: Jets in small systems

Contribution ID: 56

Type: **not specified**

Thoughts on physics opportunities with small ion collisions in ATLAS

Thursday 14 November 2024 14:25 (25 minutes)

Presenter: COLE, Brian Andrew (Columbia University (US))

Session Classification: Jets in small systems

Contribution ID: 57

Type: **not specified**

JEWEL on a fluctuating medium

Thursday 14 November 2024 14:50 (25 minutes)

Presenter: KOLBE, Isobel (University of the Witwatersrand (ZA))

Session Classification: Jets in small systems

Contribution ID: 58

Type: **not specified**

Finite size effects on jet thermalization

Thursday 14 November 2024 15:15 (25 minutes)

Presenter: Dr SOUDI, Ismail (University of Jyvaskyla)

Session Classification: Jets in small systems

Contribution ID: 59

Type: **not specified**

Welcome

Monday 11 November 2024 09:00 (10 minutes)

Presenter: WIEDEMANN, Urs (CERN)

Session Classification: Introduction

Contribution ID: 60

Type: **not specified**

Pre-hydrodynamic jet momentum broadening beyond the jet quenching parameter

Friday 15 November 2024 09:00 (20 minutes)

Presenter: LINDENBAUER, Florian (TU Wien)

Session Classification: Jets in small systems

Contribution ID: 62

Type: **not specified**

Femtoscopia in small systems

Tuesday 12 November 2024 12:05 (25 minutes)

Presenter: FABIETTI, Laura (Technische Universitaet Muenchen (DE))