# Midsummer School in QCD 2024



# **Report of Contributions**

Introduction to QCD I

Contribution ID: 1 Type: not specified

# Introduction to QCD I

Tuesday 25 June 2024 09:10 (1 hour)

Presenter: HOYER, Paul

Contribution ID: 2 Type: not specified

#### The Color Glass Condensate I

Tuesday 2 July 2024 13:30 (1 hour)

Presenter: IANCU, Edmond (Université Paris-Saclay (FR))

Welcome

Contribution ID: 3 Type: not specified

#### Welcome

Tuesday 25 June 2024 09:00 (10 minutes)

**Presenter:** KIRSCHENMANN, Henning (Helsinki Institute of Physics (FI))

Contribution ID: 4 Type: **not specified** 

# High-energy resummation and Diffraction I

Monday 1 July 2024 10:00 (1 hour)

**Presenter:** Dr CELIBERTO, Francesco Giovanni (ECT\*/FBK Trento & INFN-TIFPA)

Contribution ID: 5 Type: **not specified** 

# BFKL and low x physics I

Tuesday 25 June 2024 13:30 (1 hour)

Presenters: Dr CHACHAMIS, Grigorios (LIP Lisbon); Dr CHACHAMIS, Grigorios (LIP, Lisbon)

Contribution ID: 6 Type: not specified

# QCD and PDF I

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

Contribution ID: 7 Type: **not specified** 

# Hadronic physics, jets I

Tuesday 25 June 2024 14:30 (1 hour)

Presenter: SOTO ONTOSO, Alba (CERN)

Contribution ID: 8 Type: not specified

# **Forward Physics I**

Tuesday 25 June 2024 16:00 (1 hour)

Presenter: NEWMAN, Paul Richard (University of Birmingham (GB))

Student talk

Contribution ID: 9 Type: not specified

#### Student talk

Contribution ID: 10 Type: not specified

# Introduction to QCD II

Wednesday 26 June 2024 09:00 (1 hour)

**Presenter:** HOYER, Paul

Contribution ID: 11 Type: not specified

#### The Color Glass Condensate II

Wednesday 3 July 2024 11:30 (1 hour)

Presenter: IANCU, Edmond (Université Paris-Saclay (FR))

Contribution ID: 12 Type: not specified

# High-energy resummation and Diffraction II

Tuesday 2 July 2024 11:30 (1 hour)

**Presenter:** Dr CELIBERTO, Francesco Giovanni (ECT\*/FBK Trento & INFN-TIFPA)

Contribution ID: 13 Type: not specified

# BFKL and low x physics II

Wednesday 26 June 2024 13:30 (1 hour)

**Presenter:** Dr CHACHAMIS, Grigorios (LIP, Lisbon)

Contribution ID: 14 Type: not specified

# QCD and PDF II

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

Contribution ID: 15 Type: not specified

# Hadronic physics, jets II

Wednesday 26 June 2024 14:30 (1 hour)

Presenter: SOTO ONTOSO, Alba (CERN)

Contribution ID: 16 Type: not specified

# **Forward Physics II**

Wednesday 26 June 2024 16:00 (1 hour)

Presenter: NEWMAN, Paul Richard (University of Birmingham (GB))

Contribution ID: 17 Type: not specified

# Student talk: Light quark and gluon jet tagging at the CMS experiment

Wednesday 26 June 2024 17:00 (20 minutes)

Student talk: Light quark and glu  $\,\cdots$ 

Presenter: TOIKKA, Nico Timothy (Helsinki Institute of Physics (FI))

Contribution ID: 18 Type: not specified

# **Introduction to QCD III**

Thursday 27 June 2024 17:00 (1 hour)

Presenters: HOYER, Paul; HOYER, Peter (University of Calgary)

Contribution ID: 19 Type: not specified

#### The Color Glass Condensate III

Thursday 4 July 2024 11:30 (1 hour)

Presenter: IANCU, Edmond (Université Paris-Saclay (FR))

Contribution ID: 20 Type: not specified

# High-energy resummation and Diffraction III

Wednesday 3 July 2024 09:00 (1 hour)

**Presenter:** Dr CELIBERTO, Francesco Giovanni (ECT\*/FBK Trento & INFN-TIFPA)

Contribution ID: 21 Type: not specified

# BFKL and low x physics III

Thursday 27 June 2024 13:30 (1 hour)

**Presenter:** Dr CHACHAMIS, Grigorios (LIP, Lisbon)

Contribution ID: 22 Type: not specified

# **QCD** and PDF III

Friday 28 June 2024 16:00 (1 hour)

Presenters: GUZEY, Vadim (University of Jyvaskyla); GUZEY, Vadim

Contribution ID: 23 Type: not specified

# Hadronic physics, jets III

Thursday 27 June 2024 11:30 (1 hour)

Presenter: SOTO ONTOSO, Alba (CERN)

Contribution ID: 24 Type: not specified

# **Forward Physics III**

Thursday 27 June 2024 09:00 (1 hour)

Presenter: NEWMAN, Paul Richard (University of Birmingham (GB))

Contribution ID: 25 Type: not specified

# Student talk: Vector meson photoproduction at the LHC

Thursday 4 July 2024 16:00 (20 minutes)

Student talk: Vector meson phot  $\,\cdots$ 

Presenter: ALCERRO ALCERRO, Luis (The University of Kansas (US))

Contribution ID: 26 Type: not specified

# Introduction to QCD IV

**Presenter:** HOYER, Paul

Contribution ID: 27 Type: not specified

#### The Color Glass Condensate IV

Friday 5 July 2024 11:30 (1 hour)

Presenter: IANCU, Edmond (Université Paris-Saclay (FR))

Contribution ID: 28 Type: not specified

# High-energy resummation and Diffraction IV

Thursday 4 July 2024 09:00 (1 hour)

**Presenter:** Dr CELIBERTO, Francesco Giovanni (ECT\*/FBK Trento & INFN-TIFPA)

Contribution ID: 29 Type: not specified

# BFKL and low x physics IV

Saturday 29 June 2024 16:00 (1 hour)

**Presenter:** Dr CHACHAMIS, Grigorios (LIP, Lisbon)

Contribution ID: 30 Type: not specified

# **High Energy Soft QCD and Diffraction II**

Friday 28 June 2024 14:30 (1 hour)

**Presenter:** KHOZE, Valery (University of Durham (GB))

Coffee break

Contribution ID: 31 Type: not specified

#### **Coffee break**

Contribution ID: 32 Type: not specified

# **Hadronic physics IV**

Presenter: KLASEN, Michael

Contribution ID: 33 Type: not specified

# **High Energy Soft QCD and Diffraction I**

Thursday 27 June 2024 14:30 (1 hour)

**Presenter:** KHOZE, Valery (University of Durham (GB))

Contribution ID: 34 Type: not specified

# Student talk: HWW ggF+VBF STXS Run2 legacy analysis

Friday 28 June 2024 17:00 (20 minutes)

Student talk: HWW ggF+VBF ST  $\,\cdots$ 

**Presenter:** SHAHEEN, Rabia (KTH Royal Institute of Technology (SE))

Contribution ID: 35 Type: not specified

# **High Energy Soft QCD and Diffraction III**

Saturday 29 June 2024 09:00 (1 hour)

**Presenter:** KHOZE, Valery (University of Durham (GB))

Contribution ID: 36 Type: not specified

# Physics at the EIC I

Tuesday 2 July 2024 09:00 (1 hour)

**Presenters:** ULLRICH, Thomas; ULLRICH, Thomas

Pythia II

Contribution ID: 37 Type: not specified

#### Pythia II

Friday 28 June 2024 10:00 (1 hour)

**Presenters:** Dr HELENIUS, Ilkka (University of Jyväskylä); HELENIUS, Ilkka (Helsinki Institute of Physics (HIP)-Univ. of Helsinki, Fac. of S)

Contribution ID: 38 Type: not specified

#### Photon photon physics at the LHC

Saturday 29 June 2024 13:30 (1 hour)

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

Contribution ID: 39 Type: not specified

#### Monte Carlo, Sherpa, etc II

Wednesday 3 July 2024 13:30 (1 hour)

Presenters: PRICE, Alan; PRICE, Alan

Contribution ID: 40 Type: not specified

# Machine learning I

Monday 1 July 2024 13:30 (1 hour)

**Presenter:** AARRESTAD, Thea (ETH Zurich (CH))

Contribution ID: 41 Type: not specified

#### **TOTEM** results and prospects

Saturday 29 June 2024 17:00 (1 hour)

**Presenters:** ROYON, Christophe (The University of Kansas (US)); OSTERBERG, Kenneth (Helsinki Institute of Physics (FI)); OSTERBERG, Kenneth (University of Helsinki)

Student talk: Heavy ions at small-  $\cdots$ 

Contribution ID: 42 Type: not specified

#### Student talk: Heavy ions at small-x at CMS

Saturday 29 June 2024 18:00 (20 minutes)

Presenter: ARTEAGA ESCATEL, Saray (The University of Kansas (US))

Contribution ID: 43 Type: not specified

#### **High Energy Soft QCD and Diffraction IV**

Monday 1 July 2024 09:00 (1 hour)

**Presenter:** KHOZE, Valery (University of Durham (GB))

Contribution ID: 44 Type: **not specified** 

# Physics at the EIC II

Wednesday 3 July 2024 14:30 (1 hour)

**Presenters:** ULLRICH, Thomas; ULLRICH, Thomas

Contribution ID: 45 Type: not specified

#### Pythia III

Saturday 29 June 2024 10:00 (1 hour)

**Presenters:** Dr HELENIUS, Ilkka (University of Jyväskylä); HELENIUS, Ilkka (Helsinki Institute of Physics (HIP)-Univ. of Helsinki, Fac. of S)

Jet energy scale

Contribution ID: 46 Type: not specified

# Jet energy scale

Friday 28 June 2024 09:00 (1 hour)

Presenter: VOUTILAINEN, Mikko (Helsinki Institute of Physics (FI))

Contribution ID: 47 Type: **not specified** 

#### Monte Carlo, Sherpa, etc III

Friday 5 July 2024 14:30 (1 hour)

Presenters: PRICE, Alan; PRICE, Alan

Contribution ID: 48 Type: not specified

# Machine learning II

Tuesday 2 July 2024 16:00 (1 hour)

**Presenter:** AARRESTAD, Thea (ETH Zurich (CH))

Midsummer Sch  $\,\cdots\,$  / Report of Contributions

Saturation I

Contribution ID: 49 Type: not specified

#### Saturation I

**Presenter:** LAPPI, Tuomas

Contribution ID: 50 Type: not specified

# Student talk: Interference of Vector Mesons in Peripheral and Ultra-Peripheral Heavy Ion Collisions at STAR

Monday 1 July 2024 16:20 (20 minutes)

Student talk: Interference of Vect ...

**Presenter:** TORRES VALLADARES, Daniel (STAR Experiment)

Herwig I

Contribution ID: 51 Type: not specified

# Herwig I

**Presenter:** MASOUMINIA, Aidin (Durham University)

Contribution ID: 52 Type: not specified

# Physics at the EIC III

Thursday 4 July 2024 13:30 (1 hour)

**Presenters:** ULLRICH, Thomas; ULLRICH, Thomas

Contribution ID: 53 Type: not specified

#### QCD and PDFs I

Tuesday 25 June 2024 11:30 (1 hour)

Presenters: GUZEY, Vadim; GUZEY, Vadim (NRC Kurchatov Institute PNPI (RU))

Saturation

Contribution ID: 54 Type: not specified

#### **Saturation**

Thursday 27 June 2024 18:00 (1 hour)

**Presenter:** LAPPI, Tuomas

Contribution ID: 55 Type: not specified

#### Cosmic ray I

Tuesday 2 July 2024 14:30 (1 hour)

**Presenter:** Dr PIEROG, Tanguy

Contribution ID: 56 Type: not specified

#### Machine Learning with CMS open data

Tuesday 2 July 2024 17:00 (2 hours)

**Presenters:** LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI)); AARRESTAD, Thea (ETH Zurich (CH))

Student talk

Contribution ID: 57 Type: not specified

#### Student talk

Contribution ID: 58 Type: not specified

# Monte Carlo, Sherpa, etc I

Tuesday 2 July 2024 10:00 (1 hour)

Presenters: PRICE, Alan; PRICE, Alan

Contribution ID: 59 Type: not specified

# Physics at the EIC IV

Friday 5 July 2024 13:30 (1 hour)

**Presenters:** ULLRICH, Thomas; ULLRICH, Thomas

Contribution ID: 60 Type: not specified

# QCD and PDFs II

Wednesday 26 June 2024 11:30 (1 hour)

Presenters: GUZEY, Vadim; GUZEY, Vadim (NRC Kurchatov Institute PNPI (RU))

Hands on

Contribution ID: 61 Type: not specified

#### Hands on

**Presenter:** LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

Contribution ID: 62 Type: not specified

# Cosmic ray II

Wednesday 3 July 2024 10:00 (1 hour)

**Presenter:** Dr PIEROG, Tanguy

Contribution ID: 63 Type: not specified

#### Saturation I

Tuesday 25 June 2024 10:10 (1 hour)

**Presenter:** VENUGOPALAN, Raju

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Contribution ID: 64 Type: not specified

Student talk: slot 1

Student talk: slot 1

Contribution ID: 65 Type: not specified

# Cosmic ray III

Thursday 4 July 2024 10:00 (1 hour)

**Presenter:** Dr PIEROG, Tanguy

Contribution ID: 66 Type: not specified

#### CGC: vector mesons and diffraction II

Saturday 29 June 2024 14:30 (1 hour)

Presenters: PENTTALA, Jani (UCLA); PENTTALA, Jani

Contribution ID: 67 Type: not specified

#### **Saturation II**

Wednesday 26 June 2024 10:00 (1 hour)

**Presenter:** VENUGOPALAN, Raju

Contribution ID: 68 Type: not specified

# Hands on: Sherpa

Thursday 4 July 2024 14:30 (1 hour)

Hands on: Sherpa

Presenters: PRICE, Alan; LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

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Free slot

Contribution ID: 69 Type: not specified

#### Free slot

Contribution ID: **70** Type: **not specified** 

#### Hands on - Machine Learning with CMS open data

Monday 1 July 2024 17:00 (1h 20m)

**Presenter:** AARRESTAD, Thea (ETH Zurich (CH))

Student talk

Contribution ID: 71 Type: not specified

#### Student talk

Contribution ID: 72 Type: not specified

## Cosmic ray IV

Friday 5 July 2024 10:00 (1 hour)

**Presenter:** Dr PIEROG, Tanguy

Contribution ID: 73 Type: not specified

#### CGC: vector mesons and diffraction I

Friday 28 June 2024 13:30 (1 hour)

Presenters: PENTTALA, Jani (UCLA); PENTTALA, Jani

Contribution ID: 74 Type: **not specified** 

## **Saturation III**

Thursday 27 June 2024 10:00 (1 hour)

**Presenter:** VENUGOPALAN, Raju

Hands on: Share your docker image

Contribution ID: 75 Type: not specified

# Hands on: Share your docker image

**Presenter:** LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

Contribution ID: 76 Type: not specified

# Hands on: store and share your code in a docker container

Thursday 4 July 2024 16:20 (2h 10m)

Presenter: LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

Student talk

Contribution ID: 77 Type: **not specified** 

#### Student talk

Contribution ID: 78 Type: not specified

#### Hands-on sessions: introduction and docker

Tuesday 25 June 2024 17:00 (1 hour)

Contribution ID: 79 Type: not specified

#### Hands-on session: Git clinic

Wednesday 26 June 2024 17:40 (1 hour)

Hands-on session: Git clinic

Presenter: LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

Pythia I

Contribution ID: 80 Type: not specified

## Pythia I

Thursday 27 June 2024 16:00 (1 hour)

**Presenters:** Dr HELENIUS, Ilkka (University of Jyväskylä); HELENIUS, Ilkka (Helsinki Institute of Physics (HIP)-Univ. of Helsinki, Fac. of S)

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Hands-on

Contribution ID: 81 Type: not specified

#### Hands-on

Contribution ID: 82 Type: not specified

# Hands-on: Share your docker image & discussion and feedback about the hand-on sessions

Friday 5 July 2024 16:00 (2h 30m)

Hands-on: Share your docker im  $\,\cdots$ 

Contribution ID: 83 Type: not specified

# Hands-on: store and share your code in a Git repository

Friday 28 June 2024 11:30 (1 hour)

Presenter: LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

Contribution ID: 84 Type: not specified

## Hands-on - Exploring CMS open data

Saturday 29 June 2024 11:30 (1 hour)

Presenter: LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

Contribution ID: 85 Type: not specified

## Hands on - Getting ready for the ML tutorial

Monday 1 July 2024 11:30 (1 hour)

Presenter: LASSILA-PERINI, Kati (Helsinki Institute of Physics (FI))

Contribution ID: 86 Type: not specified

## **Machine learning III**

Wednesday 3 July 2024 16:00 (1 hour)

**Presenter:** AARRESTAD, Thea (ETH Zurich (CH))

Contribution ID: 87 Type: not specified

## Heavy ion physics at RHIC and the LHC

Monday 1 July 2024 14:30 (1 hour)

**Presenters:** CAINES, Helen (Yale University (US)); CAINES, Helen (School of Physics and Astronomy)

Contribution ID: 88 Type: not specified

## HIPscape demonstration

Friday 28 June 2024 19:30 (2h 30m)

Contribution ID: 89 Type: not specified

# Student talk: An overview of diffractive Photon+Jet Production at the ATLAS detector

Wednesday 26 June 2024 17:20 (20 minutes)

Presenter: ARBIOL VAL, Sergio Javier (Polish Academy of Sciences (PL))

Contribution ID: 90 Type: not specified

# Student talk: Exploring phase space with veto algorithm

Student talk: Exploring phase sp  $\,\cdots$ 

**Presenter:** REDOUANE SALAH, Essma (University of M'sila Algeria)

student talk: Inclusive  $J/\psi$  produ …

Contribution ID: 91 Type: not specified

# student talk: Inclusive J/ $\psi$ production in forward proton-proton and proton-lead collisions at high energy

Monday 1 July 2024 16:40 (20 minutes)

**Presenter:** GIMENO ESTIVILL, Patricia (University of Jyväskylä)

Contribution ID: 92 Type: not specified

# Student talk: Initial stage jet momentum broadening and energy loss in tBLFQ formalism

Saturday 29 June 2024 18:20 (20 minutes)

Presenters: LAMAS, Carlos (IGFAE-USC); LAMAS RODRÍGUEZ, Carlos (IGFAE-USC)

Contribution ID: 93 Type: not specified

# Student talk: Diffraction and elastic proton-proton scattering with TOTEM at the LHC

Wednesday 3 July 2024 17:00 (20 minutes)

Student talk: Diffraction and elas  $\,\cdots$ 

**Presenters:** Dr OLJEMARK, Fredrik (Helsinki Institute of Physics (FI)); OLJEMARK, Fredrik (Helsinki Institute of Physics (FI))

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Contribution ID: 94 Type: not specified

Student talk: slot 2

Student talk: slot 2

Contribution ID: 95 Type: not specified

## Student talk: The (3+1)D dilute Glasma

Saturday 29 June 2024 18:40 (20 minutes)

Student talk: The (3+1)D dilute G ...

**Presenter:** SCHMIDT, Kayran

Contribution ID: 96 Type: not specified

#### **Discussion with lecturers**

Thursday 27 June 2024 20:00 (1 hour)

Contribution ID: 97 Type: not specified

#### **Discussion with lecturers**

Tuesday 2 July 2024 20:00 (1 hour)

Contribution ID: 98 Type: not specified

#### **Discussion with lecturers**

Contribution ID: 99 Type: not specified

#### **Discussion with lecturers**

Midsummer Sch  $\,\cdots\,$  / Report of Contributions

Sauna, hiking...

Contribution ID: 100 Type: not specified

Sauna, hiking...