

Romanian High-School Students Internship Programme 2024

Report of Contributions

Contribution ID: 1

Type: **not specified**

Visit at CERN: Synchrocyclotron

Monday 3 June 2024 14:05 (50 minutes)

Presenters: Ms PHAM, Joni (University of Melbourne (AU)); DANCU, Julia-Suzana (Imperial College (GB))

Session Classification: Visit at CERN

Contribution ID: 2

Type: **not specified**

Visit at CERN: ATLAS visitor center

Monday 3 June 2024 15:05 (50 minutes)

Presenters: DANCU, Julia-Suzana (Imperial College (GB)); ZAMKOVSKA, Veronika

Session Classification: Visit at CERN

Contribution ID: 3

Type: **not specified**

Science Gateway | Workshop: Cloud Chamber

Tuesday 4 June 2024 15:45 (1h 30m)

Presenters: DAHLKEMPER, Merten Nikolay (CERN); TRECZOKS, Tobias Patrick (Technische Universität Dresden (DE))

Contribution ID: 4

Type: **not specified**

Science Gateway | Exhibitions

Contribution ID: 5

Type: **not specified**

Science Gateway | Workshop: Superconductivity

Friday 7 June 2024 09:00 (1h 30m)

Presenters: BAUMGART, Charlotte; ZOECHLING, Sarah (CERN)

Contribution ID: 6

Type: **not specified**

Visit at CERN: ALICE exhibition

Monday 10 June 2024 09:10 (50 minutes)

Presenter: KONOPKA, Piotr (CERN)

Session Classification: Visit at CERN

Contribution ID: 7

Type: **not specified**

Visit at CERN: SM18

Monday 10 June 2024 10:10 (50 minutes)

Presenters: Ms PHAM, Joni (University of Melbourne (AU)); DANCU, Julia-Suzana (Imperial College (GB)); REN, Zhongliang (University of Science and Technology of China (CN))

Session Classification: Visit at CERN

Contribution ID: 8

Type: **not specified**

Visit at CERN | CMS service cavern

Wednesday 12 June 2024 13:30 (1h 30m)

Presenters: DANCU, Julia-Suzana (Imperial College (GB)); POPESCU, Sorina (The University of Kansas (US)); NADER, Ziad (Lebanese American University (LB))

Session Classification: Visit at CERN

Contribution ID: 9

Type: **not specified**

Visit at CERN: Bondlab

Wednesday 5 June 2024 15:00 (2 hours)

Presenter: MANOLESCU, Florentina (CERN)

Contribution ID: **10**

Type: **not specified**

Meeting Point and Group Distribution

Monday 3 June 2024 13:45 (20 minutes)

in front of Synchrocyclotron (300)

Group 1 will visit SC and AVC

Group 2 will visit AVC and SC

Session Classification: Visit at CERN

Contribution ID: 11

Type: **not specified**

Meeting Point

Monday 3 June 2024 15:55 (5 minutes)

in front of building Synchrocyclotron (300)

Session Classification: Visit at CERN

Contribution ID: 12

Type: **not specified**

Science Show | Journey through a detector

Tuesday 11 June 2024 15:30 (1 hour)

Contribution ID: 13

Type: **not specified**

Welcome to CERN

Monday 3 June 2024 09:00 (1 hour)

Presenters: CAPATINA, Ofelia (CERN); ZUS, Roxana (University of Bucharest (RO)); ZOECHLING, Sarah (CERN)

Session Classification: Lectures

Contribution ID: 14

Type: **not specified**

Introduction to CERN

Monday 3 June 2024 10:15 (1 hour)

Presenter: WIENER, Jeff (CERN)

Session Classification: Lectures

Contribution ID: 15

Type: **not specified**

The scientific journey to the Higgs boson | Not all roads lead to Rome, some lead to Geneva

Tuesday 4 June 2024 09:00 (1h 15m)

Presenter: DRAGOIU, Tiberiu

Session Classification: Lectures

Contribution ID: 16

Type: **not specified**

Introduction to Elementary Particle Physics

Tuesday 4 June 2024 10:30 (1h 30m)

Presenter: ZUS, Roxana (University of Bucharest (RO))

Session Classification: Lectures

Contribution ID: 17

Type: **not specified**

Luminosity measurement in CMS and high energy physics experiments

Wednesday 5 June 2024 09:00 (1h 30m)

Presenter: DELANNOY SOTOMAYOR, Andres Guillermo (University of Tennessee (US))

Session Classification: Lectures

Contribution ID: **18**

Type: **not specified**

Planck length, mass and time with hands-on computation

Wednesday 5 June 2024 10:45 (1h 30m)

Presenter: PRALAVORIO, Pascal (CPPM, Aix-Marseille Université, CNRS/IN2P3 (FR))

Session Classification: Lectures

Contribution ID: **19**

Type: **not specified**

Need to decide

Contribution ID: 20

Type: **not specified**

Visit at CERN | Linear Accelerator and Low Energy Ion Ring

Tuesday 4 June 2024 14:15 (1 hour)

Presenters: DAHLKEMPER, Merten Nikolay (CERN); ZOECHLING, Sarah (CERN); TRECZOKS, Tobias Patrick (Technische Universitaet Dresden (DE))

Session Classification: Visit at CERN

Contribution ID: 21

Type: **not specified**

Dark matter

Thursday 6 June 2024 09:00 (1h 30m)

Presenter: PRALAVORIO, Pascal (CPPM, Aix-Marseille Université, CNRS/IN2P3 (FR))

Session Classification: Lectures

Contribution ID: 22

Type: **not specified**

Basics of radiation hard electronics

Thursday 6 June 2024 10:45 (1 hour)

Presenter: KULIS, Szymon (CERN)

Session Classification: Lectures

Contribution ID: 23

Type: **not specified**

Visit at CERN | Antimatter Factory

Friday 7 June 2024 13:00 (50 minutes)

Presenters: VALSAN, Liviu (CERN); PATRASCOIU, Mihai; BATUSOV, Vitali (Joint Institute for Nuclear Research (RU))

Session Classification: Visit at CERN

Contribution ID: 24

Type: **not specified**

Visit at CERN | Data Centre

Friday 7 June 2024 14:00 (50 minutes)

Presenters: VALSAN, Liviu (CERN); PATRASCOIU, Mihai (CERN)

Session Classification: Visit at CERN

Contribution ID: 25

Type: **not specified**

Meeting Point and Group Distribution

Friday 7 June 2024 12:50 (10 minutes)

in front of building 600

Group 1 will visit AD and DC

Group 2 will visit DC and AD

Session Classification: Visit at CERN

Contribution ID: 26

Type: **not specified**

Meeting Point

Friday 7 June 2024 14:50 (10 minutes)

in front of building 600

Session Classification: Visit at CERN

Contribution ID: 27

Type: **not specified**

Visit at CERN | LHCb surface

Monday 10 June 2024 14:30 (1h 30m)

Presenters: PIRGHIE, Ana-Camelia (Horia Hulubei National Institute of Physics and Nuclear Engineering (RO)); Dr PIRGHIE, Cristian (Horia Hulubei National Institute of Physics and Nuclear Engineering (RO))

Session Classification: Visit at CERN

Contribution ID: 28

Type: **not specified**

Lecture | Particle Physics

Tuesday 11 June 2024 09:00 (1 hour)

Presenter: ALEXA, Calin (IFIN-HH (RO))

Contribution ID: 29

Type: **not specified**

Lecture | Particle Detectors

Wednesday 12 June 2024 09:00 (1 hour)

Presenter: ALEXA, Calin (IFIN-HH (RO))

Contribution ID: **30**

Type: **not specified**

Introduction to presentations

Monday 3 June 2024 11:30 (30 minutes)

Session Classification: Lectures

Contribution ID: **31**

Type: **not specified**

Registrations 2nd group

Monday 3 June 2024 16:00 (45 minutes)

Presenter: ZOECHLING, Sarah (CERN)

Contribution ID: 32

Type: **not specified**

Registrations 1st group

Monday 3 June 2024 13:00 (45 minutes)

Presenter: ZOECHLING, Sarah (CERN)

Contribution ID: **33**

Type: **not specified**

Arrival in Geneva

Sunday 2 June 2024 12:00 (1 hour)

Contribution ID: 34

Type: **not specified**

Drop luggage at the hotel and lunch

Sunday 2 June 2024 13:00 (1h 30m)

Contribution ID: 35

Type: **not specified**

CERN treasure hunt

Sunday 2 June 2024 17:00 (1h 30m)

Contribution ID: **36**

Type: **not specified**

Online safety courses

Tuesday 4 June 2024 19:15 (1 hour)

Contribution ID: 37

Type: **not specified**

Online safety courses

Wednesday 5 June 2024 19:15 (1 hour)

Contribution ID: **38**

Type: **not specified**

Time to work on presentations

Wednesday 5 June 2024 13:30 (1h 15m)

Contribution ID: 39

Type: **not specified**

Visit at CERN | Control Centre

Monday 10 June 2024 16:15 (1h 10m)

Presenter: ZOECHLING, Sarah (CERN)

Session Classification: Visit at CERN

Contribution ID: 40

Type: **not specified**

Meeting point

in front of building 39

Session Classification: Visit at CERN

Contribution ID: 41

Type: **not specified**

Meeting point

in front of building 39

Session Classification: Visit at CERN

Contribution ID: 42

Type: **not specified**

Q&A session

Thursday 6 June 2024 16:00 (1 hour)

Presenter: PRALAVORIO, Pascal (CPPM, Aix-Marseille Université, CNRS/IN2P3 (FR))

Contribution ID: 43

Type: **not specified**

Public Event | The case of the (still) mysterious Universe

<https://indico.cern.ch/event/1419083/>

Doors open at 7.00 p.m. - Event starts at 7.30 p.m. - Duration: 2h15

Contribution ID: 44

Type: **not specified**

Time to work on presentations

Contribution ID: 45

Type: **not specified**

Science Gateway | Exhibitions

Friday 7 June 2024 10:30 (1 hour)

Contribution ID: 46

Type: **not specified**

Time to work on presentations

Friday 7 June 2024 15:15 (2h 15m)

Contribution ID: 47

Type: **not specified**

Meeting point and transport

Monday 10 June 2024 08:50 (20 minutes)

in front of building 39

Session Classification: Visit at CERN

Contribution ID: 48

Type: **not specified**

Meeting point and transport

Monday 10 June 2024 11:00 (20 minutes)

in front of building 39

Session Classification: Visit at CERN

Contribution ID: 49

Type: **not specified**

Meeting point and transport

Monday 10 June 2024 14:05 (25 minutes)

in front of building 39

Session Classification: Visit at CERN

Contribution ID: 50

Type: **not specified**

Transport

Monday 10 June 2024 16:00 (15 minutes)

Session Classification: Visit at CERN

Contribution ID: 51

Type: **not specified**

Science Gateway | Exhibitions

Tuesday 11 June 2024 14:00 (1h 30m)

Meeting point at 14:00 is the “Tulip Tree”

Contribution ID: 52

Type: **not specified**

Visit at CERN | ATLAS Tilecal

Thursday 13 June 2024 14:00 (1h 30m)

Presenters: ALEXA, Calin (IFIN-HH (RO)); POPENECIU, Gabriel (Nat.Inst.for Research & Development of Isotopic and Molecular Tech (RO))

Contribution ID: 53

Type: **not specified**

Final presentations

Contribution ID: 54

Type: **not specified**

Final presentations

Contribution ID: 55

Type: **not specified**

Meeting Point and walk to LEIR

Tuesday 4 June 2024 13:50 (25 minutes)

in front of building 39

Session Classification: Visit at CERN

Contribution ID: **56**

Type: **not specified**

CERN people bingo

Wednesday 12 June 2024 16:30 (45 minutes)

Contribution ID: 57

Type: **not specified**

Movie night: Particle Fever

Contribution ID: 58

Type: **not specified**

Time to work on presentations

Monday 10 June 2024 11:30 (1h 30m)

Contribution ID: 59

Type: **not specified**

"Mindful Hands"-on Session

Tuesday 11 June 2024 10:15 (2 hours)

Try out different hands-on experiments, control a mechanical arm with your mind, and observe the sun (or clouds) with a telescope! :)

Presenters: MANOLESCU, Florentina (CERN); POBLOCKI, Marcin Tadeusz (CERN)

Contribution ID: **60**

Type: **not specified**

Time to work on presentations

Wednesday 12 June 2024 10:15 (1h 15m)

Contribution ID: **61**

Type: **not specified**

Time to work on presentations

Wednesday 12 June 2024 15:40 (45 minutes)

Contribution ID: **62**

Type: **not specified**

Time to work on presentations

Thursday 13 June 2024 09:00 (3h 15m)

Contribution ID: **63**

Type: **not specified**

Time to finish presentations

Thursday 13 June 2024 16:00 (1h 45m)

Contribution ID: **64**

Type: **not specified**

Time to work on presentations

Thursday 6 June 2024 13:30 (2h 30m)

Contribution ID: 65

Type: **not specified**

Meeting point and transport

Monday 10 June 2024 17:25 (25 minutes)

in front of building 39

Session Classification: Visit at CERN

Contribution ID: 66

Type: **not specified**

Romanian Teacher and Student Programme Lunch

Contribution ID: 67

Type: **not specified**

Meeting point and transport

Wednesday 12 June 2024 12:50 (40 minutes)

in front of building 39

Session Classification: Visit at CERN

Contribution ID: **68**

Type: **not specified**

Meeting point and transport

Wednesday 12 June 2024 15:00 (40 minutes)

in front of building 39

Session Classification: Visit at CERN

Contribution ID: **69**

Type: **not specified**

Nothing standard about the Standard Model

Friday 14 June 2024 09:50 (20 minutes)

Presenters: BOBELEAC, Maria-Anastasia; IOSIFESCU, Sasha Mihail

Session Classification: Final presentations

Contribution ID: 70

Type: **not specified**

What's that? Did you see that??

Friday 14 June 2024 10:10 (20 minutes)

Introduction to particle detection

Presenters: DANCIU, Eduard-Florin; MATEI, Stefan

Session Classification: Final presentations

Contribution ID: 71

Type: **not specified**

How Does an Onion-like Topology Aid in Particle Identification?

Friday 14 June 2024 10:50 (20 minutes)

Case study: ATLAS detector

Presenters: CHITU, Darius ('Andrei Şaguna' National College); CHITA, George-Dan

Session Classification: Final presentations

Contribution ID: 72

Type: **not specified**

A not so future collider: HL-LHC

Friday 14 June 2024 11:10 (20 minutes)

High-luminosity Large Hadron Collider

Presenters: ZGURA, Andra Irina; RUSU, Andrei Alexandru

Session Classification: Final presentations

Contribution ID: 73

Type: **not specified**

Applications of fundamental particles in medical imaging

Friday 14 June 2024 09:30 (20 minutes)

Presenters: ANA, Andrei; GEORGESCU, Daria-Ioana

Session Classification: Final presentations

Contribution ID: 74

Type: **not specified**

The unseen hero - The worldwide LHC computing grid

Friday 14 June 2024 11:30 (20 minutes)

Presenters: RADU, Andrei Stefan; BICHIR, Teodor

Session Classification: Final presentations

Contribution ID: 75

Type: **not specified**

What's the matter with antimatter?

Friday 14 June 2024 14:05 (20 minutes)

Presenters: MUNTEANU, David-Ioan; VASIU, Luca-Mihai

Session Classification: Final presentations

Contribution ID: 76

Type: **not specified**

The role of machine learning at CERN

Friday 14 June 2024 13:45 (20 minutes)

Presenters: TEODORESCU-DRUC, Alexandru; PUSCALAU, Calin-Andrei

Session Classification: Final presentations

Contribution ID: 77

Type: **not specified**

Dark matter

Friday 14 June 2024 14:25 (20 minutes)

Presenters: FURDUI, Darius Cristian; VARZARU, Gheorghe-Nelu

Session Classification: Final presentations

Contribution ID: 78

Type: **not specified**

Cosmology: We don't really know

Friday 14 June 2024 14:45 (20 minutes)

Presenters: BOLDUREANU, Andreea; BRATAN, Simona-Maia

Session Classification: Final presentations

Contribution ID: 79

Type: **not specified**

Beyond the Standard Model

Friday 14 June 2024 15:20 (20 minutes)

One equation, too many variables

Presenters: BILASCHI, Simina-Gabriela; CARUTA, Sorina

Session Classification: Final presentations

Contribution ID: **80**

Type: **not specified**

The Future of Particle Accelerators

Friday 14 June 2024 15:40 (20 minutes)

Presenters: VIZITIU, Andrei; RADNEANTU, Maria Elena

Session Classification: Final presentations

Contribution ID: **81**

Type: **not specified**

Conclusions and "au revoir"! :)

Friday 14 June 2024 16:15 (45 minutes)

Presenters: ZUS, Roxana (University of Bucharest (RO)); ZOECHLING, Sarah (CERN)

Session Classification: Final presentations

Contribution ID: 82

Type: **not specified**

Programme Summary

Friday 14 June 2024 09:00 (30 minutes)

Presenters: TUDORACHE, Alexandra (Horia Hulubei National Institute of Physics and Nuclear Engineering (RO)); ALEXA, Calin (IFIN-HH (RO)); DUMINICA, Ioana (University of Bucharest (RO)); ROTARU, Marina (Horia Hulubei National Institute of Physics and Nuclear Engineering (RO)); ZUS, Roxana (University of Bucharest (RO)); TUDORACHE, Valentina (Horia Hulubei National Institute of Physics and Nuclear Engineering (RO))

Session Classification: Final presentations