Introduction to Accelerator Physics - 2023

Report of Contributions

https://indico.global/e/13062

Contribution ID: **1** Type: **not specified**

Visit - Magnet factory

Presenters: VERWEIJ, Arjan (CERN); HERNALSTEENS, Cedric (CERN)

Contribution ID: **2** Type: **not specified**

Coffee break

Contribution ID: **3** Type: **not specified**

Lecture - Longitudinal motion

Presenter: HERNALSTEENS, Cedric (CERN)

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

Lunch break

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

Lecture - Longitudinal motion

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **6** Type: **not specified**

Introduction to CERN and to the accelerator complex

Presenter: MANGLUNKI, Django

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

Lecture - Introduction to accelerator physics

Presenter: HERNALSTEENS, Cedric (CERN)

Session Classification: Lectures

Contribution ID: **8** Type: **not specified**

Coffee break

Contribution ID: **9** Type: **not specified**

Lecture - DC accelerators and betatron

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **10** Type: **not specified**

Lunch break

Contribution ID: **11** Type: **not specified**

Lecture - Linear accelerators

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **12** Type: **not specified**

Visit - SynchroCyclotron and LEIR

Contribution ID: **13** Type: **not specified**

Tutorial 1

Presenter: VANWELDE, Marion

Contribution ID: **14** Type: **not specified**

Arrival in Geneva

Sunday 5 February 2023 14:00 (3 hours)

Transit from the airport to CERN by bus and tram. Alternatively you can walk to the tram, it is relatively short. See attached screenshot.

Go to the CERN main entrance (”entrance B”) and inform the guard that you have a hotel registration. He’ll let you in and you can go to the hotel and register. In case of need ask the guard to call me (65803). You can consult https://maps.cern.ch, the important buildings are 39 (hotel reception), 501 (restaurant 1) and 55 (next to entrance B).

We will try to meet you at the hotel around 16:30 to make sure that everything is fine. We can then discuss practical details (food, groceries, etc.).

Some general information:
- The weather is quite cold, and we will be walking around the campus for the different visits; please plan accordingly.
- The CERN restaurants are open every day from 6am to 10pm, so you can possibly have all your meals there. You also have the possibility to cook in a shared kitchen in the hostel. On Sunday or early in the week we’ll organise so that I can show you where you can go for grocery shopping (by bus or on foot). For lunches expect a full hot meal to cost between 10 and 15 CHF (= 10 to 15 EUR). You don’t need to carry CHF cash, all restaurants and cafeterias accept payment by card (in CHF or in EUR –the worst option is to pay cash in EUR).
- Regarding the visits we have a very exciting program of different installations with experts to guide us. These are an integral part of the course, and your active participation is encouraged and expected. During the visits, wear closed-toe shoes, avoid bulky clothes and large bags.
- On Sunday, when arriving at the airport, in case you want to buy some food or plan for your evening dinner, the Migros (grocery store) of the airport will be open. It is located on the train station side of the airport.
- The EDUROAM wifi network is available at CERN and at the airport. The airport also has some free Wifi. You’ll be able to register on the CERN free wifi as well (CERN-Visitors). Pay attention that using 4g/5g connections while on a Swiss carrier might be costy⋯I suggest that you lock your phone on a French carrier or deactivate data to avoid bad surprises.
- If you plan to go to Geneva directly from the airport, you can go by train for the cost of a bus/tram ticket. You can then come back with Tram 18 from Cornavin station.

Contribution ID: **15** Type: **not specified**

Lecture - Circular accelerators

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **16** Type: **not specified**

Coffee break

Contribution ID: **17** Type: **not specified**

Lecture - Transverse motion

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **18** Type: **not specified**

Lunch break

Contribution ID: **19** Type: **not specified**

Lecture - Transverse motion

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **20** Type: **not specified**

Coffee break

Contribution ID: **21** Type: **not specified**

Tutorial session II

Presenter: VANWELDE, Marion

Contribution ID: **22** Type: **not specified**

Visit - AD and data center

Contribution ID: **23** Type: **not specified**

Lecture - Cyclotrons

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **24** Type: **not specified**

Visit - ????

Contribution ID: **25** Type: **not specified**

Tutorial II (continued)

Presenter: VANWELDE, Marion

Contribution ID: **26** Type: **not specified**

Visit - SPS BA3

Presenters: HERNALSTEENS, Cedric (CERN); MANGLUNKI, Django; VANWELDE, Marion; CETTOUR CAVE, Stephane (CERN)

Contribution ID: **27** Type: **not specified**

Visit - ATLAS

Presenters: MANGLUNKI, Django; POTAMIANOS, Karolos (University of Warwick (GB))

Contribution ID: **28** Type: **not specified**

Lecture - Synchrotrons

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **29** Type: **not specified**

Coffee break

Contribution ID: **30** Type: **not specified**

Tutorial

Presenter: VANWELDE, Marion

Contribution ID: **31** Type: **not specified**

Lecture - Colliders and the Large Hadron Collider (LHC)

Presenter: HERNALSTEENS, Cedric (CERN)

Contribution ID: **32** Type: **not specified**

Coffee break

Contribution ID: **33** Type: **not specified**

Seminar - Proton and ion filling schemes for the LHC

Presenter: MANGLUNKI, Django

Contribution ID: **34** Type: **not specified**

Lunch break

Contribution ID: **35** Type: **not specified**

Seminar - Future accelerators

Presenter: ANDRE, Kevin Daniel Joel (CERN)

Contribution ID: **36** Type: **not specified**

Tutorial III

Presenters: HERNALSTEENS, Cedric (CERN); VANWELDE, Marion

Contribution ID: **37** Type: **not specified**

Coffee break

Contribution ID: **38** Type: **not specified**

Q&A

Presenters: HERNALSTEENS, Cedric (CERN); RAMOISIAUX, Eliott (Université Libre de Bruxelles); VANWELDE, Marion

Contribution ID: **39** Type: **not specified**

Registration as professional visitors

Tuesday 7 February 2023 13:20 (1 hour)