

Welcome to the ICFA mini workshop on Beam-Beam effects in Circular Colliders!



T. Pieloni (EPFL), L. Rivkin (CHART-PSI), X. Buffat(CERN)

International Organizing Committee IOC

Chair of the International Organising Committee:

D. Schulte, CERN, Switzerland **Members:**

- J. Qiang, LBNL, USA D. Zhou, KEK, Japan
- A. Valishev, Fermilab, USA
- F. Willeke, BNL, USA
- Y. Zhang, IHEP, China
- F. Zimmermann, CERN, Switzerland
- T. Pieloni, EPFL, Switzerland
- M. Boscolo, INFN, Italy
- Y. Jiancheng, Inst. Modern Phys, China
- H. Bartosik, CERN, Switzerland

Local Organizing Committee IOC

- C. Craman E. Hoffmann
- L. Van Riesen-Hapt

Welcome to EPFL!

A bit about EPFL

- Founded in 1969 with the mission to "train talented engineers in Switzerland"
- A yearly increasing population of 18'000, including 13'400 students
- More than 130 nationalities (57% of foreign students)
- 29 Masters' and 22 PhD degrees available
- 428 laboratories and chairs
- 4'260 scientific publications in 2023



Laboratory of Particle Accelerator Physics

- Small team mainly involved in beam dynamics studies for the FCC: simulation models and experimental studies. But also LHC, HL-LHC, SLS2, Plasma Acceleration and much more.
- New laboratory with 2MeV H⁻ RFQ + FODO cell under development to train students during lab work for High Energy and Accelerator Physics classes
- 2 Courses Introduction and Adavanced Accelerator Physics, Laboratory experiments and Master Thesis
- 1 Professor, 1 Senior Sientist, 3 post-docs, ~15 PhD Students and ~2-3/year Master Students, ~2-4/year laboratory students









Introduction to particles accelerators PHYS-448 Advanced Concept in Accelerator Physics PHYS-751

Campus life

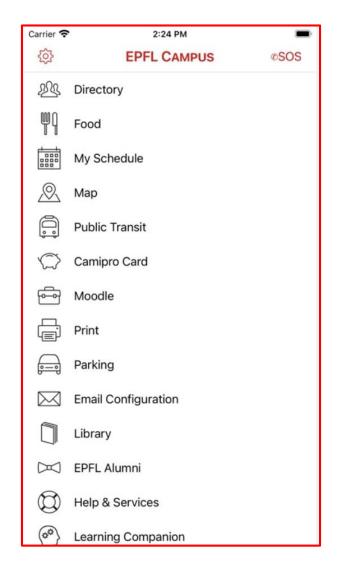
- 125 buildings
- 34 catering points
- EPFL Innovation Park : 152 companies present including 107 startups
- Host of the biggest student festival in Europe: Balélec



A guide to get around...

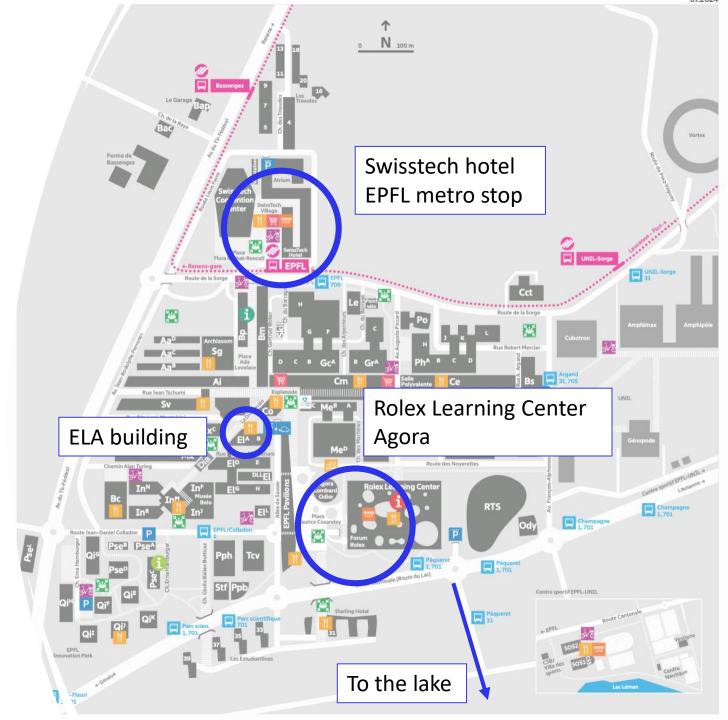
- EPFL Campus app
 - Find out about food options and access to the differents restaurants / food trucks on campus
 - Use the map to find your way





Things to do around EPFL

- Go to Agora to have lunch with a view
- Go for a walk and swim to the Lac Léman
 - plage du Pélican
 - plage de Vidy



Visiting Lausanne

- Take the metro from EPFL (15 minutes to Flon lively part of the city!)
- Cathedral
- Esplanade de Montbenon (parc with a view)
- Olympic museum
- Vidy-Ouchy lakeside walk
- <u>L'Art Brut</u> when art is unfettered by cultural and/or societal conditioning



Workshop overview



- Important moment to gather experts on colliders: in operation, under construction or under desing. Also in view of the very special moment of CERN and the European Strategy for High Energy Physics
- Sponsors



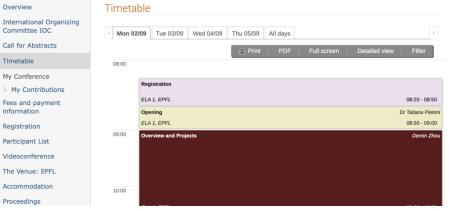
• Photo on Wednesday at 12:35 at the EPFL Agora'



Workshop program

- Timetable very dense organized in sessions with several discu breaks:
 - Overviews and Collider projects: operational, under design
 - Single Particle Effects
 - Coherent Effects
 - Luminosity and beam distribution
 - Codes
 - Accelerator design
 - General Summary and Outlook (ends Thursday at 16:30)
- Closing session by K. Oide and J. Wenninger: highlight advances, open questions and inspire future developments
- Please, draft version of talks should be uploaded ahead of time to organize discussions.
- Proceedings details at the closing. Deadline 15th Nov 2024.





Workshop: social events

- Event Dinner at 19:00 directly at the location (city center)
- Outing by Bus Wednesday afternoon 14:00 18:00

Walk in the wineyards + Wine experience and tasting

Lavaux Vineyards UNESCO heritage



Le Vaudois Lausanne





Contact details

- Xavier +41227663591 and Tatiana +41216934861 in case of problems.
- Adm <u>bb24@epfl.ch</u> Esther Hofmann and Corinne Cramer

We wish you a productive workshop full of discussions and quality time at EPFL!