

Laboratory for Particle  
Accelerators Physics  
LPAP, EPFL

Feedback from a Master Project at CERN

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# Before my master project

- Knowledge about particle accelerator physics: lectures of Prof. Rivkin, no semester projects (TP4)
  - Motivation came from the visits organized at PSI and CERN where we could see the control rooms and the LHCb detector
  - Choice between PSI and CERN for my master project. In any case, I knew I would take a good decision!
- ➡ personal choice, but the motivations for going to CERN are evident! LHC, CLIC, SPS,... there are many options for your master project.

# During my master project (1)

## PROJECT:

- Title: “Multi-bunch effect of resistive wall in the Beam Delivery System of the Compact Linear Collider”
- About wake-fields (See Prof. Rivkin’s last slide of last lecture...)
- Working on the CLIC-project (possible next accelerator after LHC)
- Almost only numerical simulations in C

## ADVANTAGES:

- Challenging topic, beyond the theory seen in class
- Strong improvements in C-coding

# During my master project (2)

## IN PRACTICE:

- Nice to work on CLIC (the future collider ?), working with the R&D team, participation in meetings and workshops
- Incredibly nice supervisor, always ready to help and explain the theory
- Master thesis published as an internal review of CERN (CLIC-Note)
- Poster of my work at an international conference, published in the proceedings
- Possibility of financial arrangements for travel expenses from Lausanne to Geneva, but not guaranteed

# Conclusion

Very interesting and challenging period at CERN, working in a nice atmosphere, intellectually rewarding!

Do not hesitate to contact me if you have any question!

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