



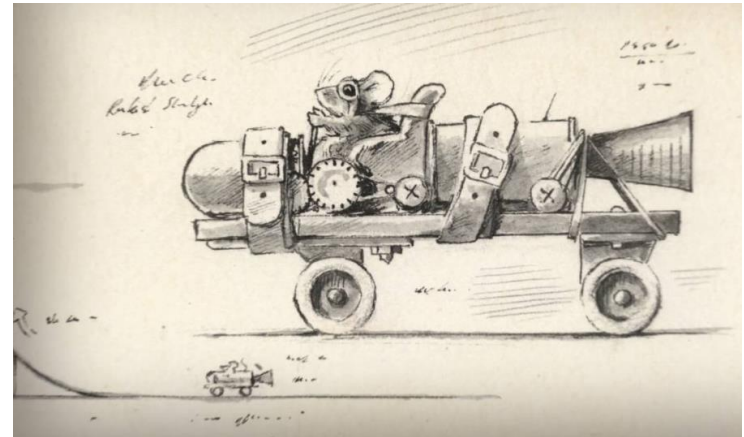
Dimitri Pracht

CERN Technical Student 01.08.2018 - 31.07.2019



About me

- 25 years old
- From Hanover, Germany
- Bachelor studies: Electrical Engineering
- Doing my Master in Mechanical Engineering
- Technical Student
 - Start Time: 01.08.2018
 - Duration: 12 months



Experience



- At the university:
 - Electrical racing car for Formula Student Electric
 - Electrical and mechanical design
 - Build up the entire team
- In the industry:
 - Nexans Germany in Hanover (Student trainee)
 - Cryogenic & Superconducting Systems
 - Optimization of the long-term vacuum of cryogenic transfer lines
 - Searching for new MLI materials
 - Machines & Automation
 - Development of new welding machines
 - Process optimization for laser welding processes



Hobbies

- Cycle with the bike
- Climbing
- Cooking
- Travel

Work at CERN

- Working with the STEAM team
- Build the model of the RQF/RQD circuit
 - Build the MQ magnet model using SIGMA (COMSOL: FEM Simulation)
 - Build the electrical circuit using PSpice
 - Build the MQ magnet model using LEDET
 - Build the complete circuit+magnets model using COSIM
 - Validation of the SIGMA, LEDET, PSpice, COSIM models
 - Document everything (LHC documentation + Thesis)
- Cold diodes used in quench protection circuits
 - Equivalent lumped-element model
 - Model validation using past data from diode test campaigns, magnet test facility (SM18) and LHC operation
 - Experimental activities to gather more data