EAJADE Secondment - Participant

About me

Marton ADY

Applied physicist
@CERN's vacuum group

Contact: marton.ady@cern.ch

Studies

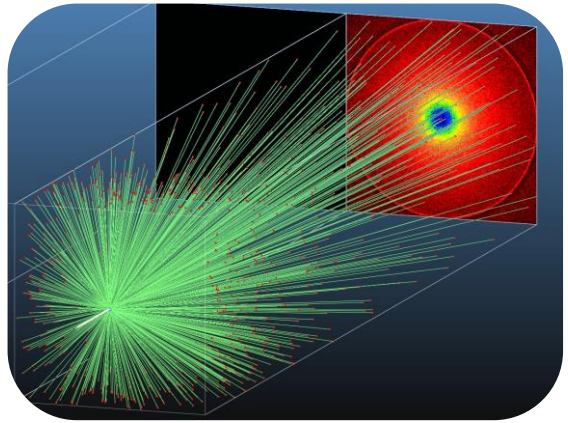
- **PhD in physics:** Ecole Polytechnique Federale de Lausanne (2016)
- **MSc in engineering:** Ecole Centrale Paris (2013)
- **MSc in physics:** Budapest University of Technology and Economics (2013)

Work

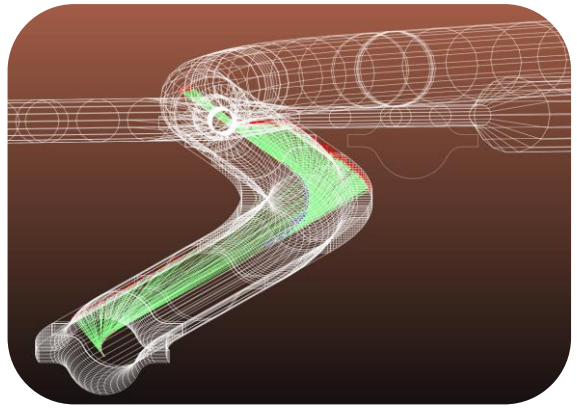
- **CERN (2011-present)**
  - Geneva, Switzerland
  - applied physicist
  - Monte Carlo simulations of vacuum and synchrotron radiation
- **KEK (2014, 2015 and 2024)**
  - Tsukuba, Japan
  - guest researcher
- **TOTAL Energies**
  - Balikpapan, Indonesia
  - drillings intern

Research topic

Monte Carlo simulations of Ultra High Vacuum (developing MolFlow+):



Monte Carlo simulations of Synchrotron Radiation (SynRad+):



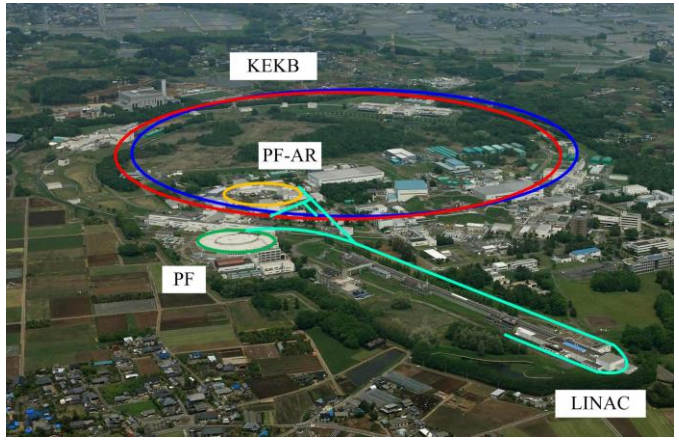
More info: https://molflow.web.cern.ch/

EAJADE Secondment - Program

Secondment period

2024 April – June (12 weeks)

Receiving Institution



- KEK (High Energy Accelerator Research Organisation)
- Tsukuba, Japan (50km northeast of Tokyo)

- SuperKEKB vacuum group
- Group leader and host: prof. Kyo Shibata

Learning as guest

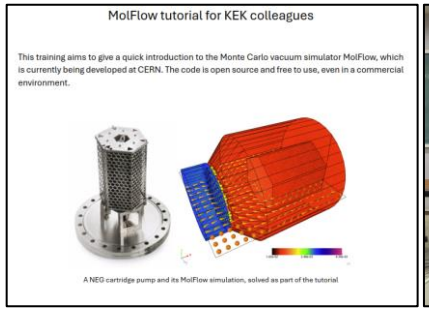
SuperKEKB commissioning process and daily operations

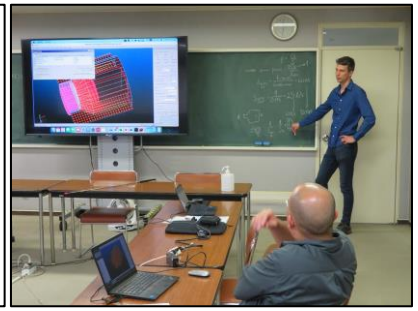
Vacuum operations

Accelerator components unique to KEK

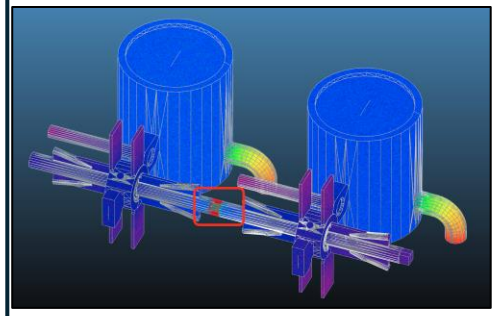
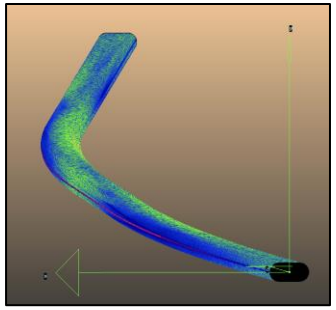
Training

Training KEK personnel to MolFlow+ software use and vacuum calculations (4 sessions)





Simulations

Pumping speed in an ARES cavity

Heat load due to synchrotron radiation