






GÉRALDINE RÄUBER, PHD

Particle Physicist - Data Analyst - Software Developer

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EXPERIENCES

Graduate Developer

SAP Pioneer

 Feb. 2025 - Now

 Munich, Germany

- Working on the FSDM Adapter within SAP Pioneer, delivering data from Financial Services Data Management (FSDM) to Financial Products Subledger (FPSL), ensuring accurate and efficient integration.
- Actively programming in ABAP as part of daily development tasks, following the completion of initial training.

Researcher

Austrian Academy of Sciences (ÖAW) and HEPHY

 May 2021 - June 2024

 Vienna, Austria

- Conducted research in particle identification techniques, and τ and dark matter physics within high-energy physics frameworks.
- Participated in national and international physics conferences, presenting research findings and engaging with the scientific community.
- Helping Master's students by providing guidance on research methodologies and data analysis tools.

EPFL's Master Valorization program

École Polytechnique Fédérale de Lausanne (EPFL) and LPHE

 Feb. - May 2021

 Lausanne, Switzerland

- Continuation and extension of the work done for the master's degree within the LHCb $R_{K\pi\pi}$ analysis research team.

EDUCATION

PhD in Technical Physics

Vienna University of Technology (TU Wien)

Austrian Academy of Sciences (ÖAW), Institute of High Energy Physics (HEPHY)

 June 2024

 Vienna, Austria

- Thesis subjects: *Measurement of $|V_{us}|$ using hadronic τ decays at Belle II*
- General grade: 1 on a scale going from 1 (very good) to 5 (unsatisfactory)

Master of Science MSc in Physics

École Polytechnique Fédérale de Lausanne (EPFL), High Energy Physics Laboratory (LPHE)

 February 2021

 Lausanne, Switzerland

- Thesis subject: *Testing lepton flavour universality in $B \rightarrow K\pi\pi\ell\ell$ decays using 2017 LHCb data*
- General grade: 5.37 on a scale going from 6 (excellent) to 1 (very poor)

LANGUAGES

- French: Native speaker
- English: Proficient (C1)
- German: Intermediate (B1-B2)

COMPUTER SKILLS & INTERESTS

Operating systems

- Linux (Ubuntu), MacOS, Windows

Programming languages

- C++, Python, ROOT, ABAP, HTML, CSS, PHP, JS, SQL, \LaTeX

ML / MVA modeling

- scikit-learn, TMVA, PyTorch

Data analysis

- Pandas Dataframe, RDataframe, pyhf, RooFit, Matplotlib, Seaborn

Code editors

- Geany, VS code, Pulsar, Eclipse

Document editors

- Overleaf, Texmaker, Word, Keynote

Graphics, Audio and Video editors

- Inkscape, GIMP, Muscore, Garage Band, iMovie

Methodologies & Tools

- Agile methodology, Jira, Confluence, Github, WTS, VDI

ACTIVITIES

- Member of the European Committee for Future Accelerators (ECFA) Early-Career Researchers (ECR) Panel from 2022 to 2024
- Flute player since 2005, awarded a music certificate with congratulations in May 2019. Member of the Riviera Symphonic Orchestra (2015–2021) and the Technical University of Vienna Orchestra (2022–2023)
- Regular yoga practice and participation in various sports