

# Hugo Banderier

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## Work experience

- Currently **Doctoral student**, *Climate Impacts group*, Universität Bern  
Jet stream dynamics and their links to surface weather extremes in Europe
- Autumn 2021 **Research Assistant**, *HyQu*, ETH Zürich  
Continuation of master thesis project and paper writing.
- Autumn 2020 **Trainee**, *PSI*, Villigen  
Testing the limits of EHT beam splitter for the upcoming TATTOOS project.
- 2017–2019 **Tutor**, *EPFL*, Lausanne  
C++ Programming, classical mechanics and complex analysis depending on the semester.

## Education

- 2019–2022 **Physics Master**, *ETH*, Zürich  
Courses taken : QFT, quantum optics, GR, quantum information processing, computational quantum physics, quantum acoustics, introduction to ML, weather and climate models, radiation and climate change, HPC for climate science.
- **Second semester project** In Prof. Christoph Schär's Climate and Water cycle group (*HyMet*). Statistical analysis of single precision climate simulations.
  - **Master Thesis** In the *HyQu* lab, COMSOL simulation and predictions for new generations of  $\hbar$ BAR devices using modified EPR method.
  - **Semester project** In Prof. Yiwen Chu's *Hybrid Quantum Devices (HyQu)* lab, setting up of free space quantum Brillouin optomechanics experiment.
- 2016–2019 **Physics Bachelor**, *EPFL*, Lausanne  
Strong bases in most fields of physics, analysis, linear algebra and C++ programming, with extensive and diverse experimental work.

## Languages

French : **Native**

English : **Fluent**

German : **Basic**

## Associative life

- 2017–2019 **"Coaching"**, **"Physics Travel"**, *EPFL*, Lausanne  
Welcome of the new physics section students, organisation of events and section's trip.

## Hobbies and interests

Bouldering, in- and outdoors climbing, hiking, politics, cooking