

Valentin Boettcher

4701 Rue Saint-Dominique protagon.space
H2T1T7 Montreal git.protagon.space
+1 438-225-6655 physik.protagon.space
hiro@protagon.space github.com/vale981

“Why did I enjoy it? I used to play with it. I used to do whatever I felt like doing—it didn’t have to do with whether it was important for the development of nuclear physics, but whether it was interesting and amusing for me to play with.”

– Richard Feynman

INTERESTS

- Open Quantum Systems, Quantum Thermodynamics, Stochastic Methods
- Relativity, Differential Geometry, Calculus
- Programming, GNU/Linux, NixOS, Free and Open Source Software (FOSS)
- Music (Saxophone, Drumset, Bass-Guitar)

Education

2008–2012
Terms 5–8

Gymnasium (secondary school)
Zabel Gymnasium, Gera [DE]

2012–2014
Terms 9–10

Special Class for Music
Goethe Gymnasium Rutheneum (secondary school), Gera [DE]

2014–2016
Terms 11–12

Oberstufe (high school), Abitur, Grade 1,3 (775/900) ~ A Thesis:

- **Advanced Subjects:** Mathematis, Physics, History, German, Englisch
- **Seminarfach (Scientific Project):** “Nuclear Fusion as potential Energy Source of the Future” (14 pkt ~ A)

Goethe Gymnasium Rutheneum, Gera [DE]

2017–2020

Physics Bachelor, Bachelor of Science, Grade 1,0 ~ A(+)
Thesis: [“A Study of Monte Carlo Methods and their Application to Diphoton Production at the Large Hadron Collider”](#)
Technische Universität Dresden, Dresden [DE]

2020–2022

Physics Master, Master of Science, Grade 1,0 ~ A(+)
Thesis: [“Accessing the Global Unitary Dynamics of Strongly Coupled Open Quantum Systems”](#)
Technische Universität Dresden, Dresden [DE]

Work Experience

2016–2019

DEPARTMENT OF CONSERVATION
Software Development, Administration, Technical Support
Wellington [NZ] (2016), Remote

since 2019 URBAN WILDLIFE TRUST
Software Development, Administration, Technical Support
 Remote

2016-2017 VARIOUS HOSTS
WWOOFing: Gardening, Landscaping
 New Zealand, North/South Island

2017 TOM LIND-JACKSON
Software Development Contracting
 Dunedin [NZ], Remote Work

2017 HOGWARTZ BACKPACKER HOSTEL
Housekeeping
 Dunedin [NZ]

2017-2019 SIMUNOVA
Web Development
 Leipzig [DE], Dresden [DE]

since 2017 KSTARS (OPEN SOURCE)
Software Development, 2021 Google Summer of Code

since 2018 TIEFGANG
Volunteering
 Dresden [DE]

2019-2020 STUDENTENWERK DRESDEN
WOMIKO Tutor
 Dresden [DE]

2019 EMMY NOETHER-NACHWUCHSGRUPPE, SHERPA
Undergraduate Assistant: Documentation, Continuous Integration
 Dresden [DE]

2021 CHAIR FOR THEORETICAL QUANTUM OPTICS
Research Assistant: Typesetting
 Dresden [DE]

2022 INSTITUTE OF THEORETICAL PHYSICS
Tutoring: Theoretical Mechanics
 Dresden [DE]

2023 MCGILL UNIVERSITY
PhD Candidate and Teaching Assistant
 Montreal [CA]

Languages

German (native)
Englisch (Cambridge English Level 3, Grade A \approx C2)