



Dr. Merten Dahlkemper

Science Educator · Information Seeker · Physicist

My passion is the finding of connections.
I love to learn new things and share it with others.

mertensworld.ch

[Nyon](#)

[/merten-dahlkemper](#)

[Malberten](#)

GOALS

I like to play with data and discover new things.

I have been working in astrophysics and particle physics education and am always excited to learn new things.

I enjoy connecting seemingly unrelated ideas, and share the fascination of deep connections.

SKILLS



WORK EXPERIENCE

July 2024
Oct 2020

Doctoral Student

CERN · Meyrin, GE, Switzerland

PhD project in physics education research: Developing learning material to teach a particle physics subject to high-school students. Included an educational reconstruction of multiple particle physics topics as well as conducting teaching experiments with students and multiple eye-tracking studies to obtain in-depth knowledge about students' thought processes.



Sep 2020
Jul 2020

Research Assistant

UNIVERSITY OF GÖTTINGEN · Göttingen, Germany

Included literature research for multiple topics in physics education as well as setting up an eye-tracking lab at the Physics faculty of the University of Göttingen.



Jul 2020
Apr 2020

Intern

COUNCIL FOR INFORMATION INFRASTRUCTURES · Göttingen, Germany

Internship in the secretariat of a science policy advisory council. Included literature research about aspects of information infrastructure policies in European countries.



Mar 2020
Dec 2019

Research assistant

UNIVERSITY LIBRARY GÖTTINGEN · Göttingen, Germany

Included a variety of tasks behind the scenes of a large research library.



Sep 2019
Jan 2019

Research assistant

UNIVERSITY OF GÖTTINGEN · Göttingen, Germany

Included research in astrophysical databases as well as data cleaning.



Dec 2018
Jan 2018

Research assistant

UNIVERSITY OF GÖTTINGEN · Göttingen, Germany

Working in the collection of historical astrophysical instruments. Taking photos and doing literature research.



Mar 2020
Oct 2016

Teaching assistant

UNIVERSITY OF GÖTTINGEN · Göttingen, Germany

Working as teaching assistant for multiple lectures (physics lab course, preparatory mathematics course, introduction to astrophysics). Mentoring physics students, correcting lab reports and worksheets, explaining mathematical and physical concepts. In the last six months I organised and facilitated a seminar on various topics related to the climate crisis named "Scientific Literacy".



TECH

R	●	●	●	●	●
Python	●	●	●	●	●
Excel	●	●	●	●	●
L ^A T _E X	●	●	●	●	●
Jupyter Notebooks	●	●	●	●	●
Javascript	●	●	●	●	●
C++	●	●	●	●	●
Arduino	●	●	●	●	●

LANGUAGES

English	Fluently
German	Mother tongue
French	Good Knowledge

HOBBIES

Running
Climbing
History
Photography
Programming
Travelling

FORMAL EDUCATION

2024
2020



PhD

UNIVERSITY OF GÖTTINGEN · Göttingen, Germany 📍

PhD in Physics Education Research.

Thesis Title: *The Use of Feynman Diagrams in Physics Education: Opportunities, Challenges, Practices*. Supervisors: Prof. Dr. Pascal KLEIN, Prof. Dr. Andreas MÜLLER

2020
2016



Master of Science

UNIVERSITY OF GÖTTINGEN · Göttingen, Germany 📍

Master of Science with a focus in astrophysics.

Thesis title: *Metallicity Trends in Globular Clusters*. Supervisor: Prof. Dr. Stefan DREIZLER

2016
2013



Bachelor of Science

UNIVERSITY OF GÖTTINGEN · Göttingen, Germany 📍

Bachelor of Science with a Bachelor thesis in astrophysics.

Thesis title: *A scaling law for magnetic fields of rapidly rotating stars*. Supervisor: Prof. Dr. Ansgar REINERS

VOLUNTARY ACTIVITIES

Today
2020



Science communicator

CERN · Meyrin, Switzerland 📍

I give guided tours, lab workshops, and science shows for the interested public, students and teachers to communicate the science done at CERN.

2018
2016



Member of the federal board

JUNGE DEUTSCHE PHYSIKALISCHE GESELLSCHAFT · Germany 📍

I was member for university politics and society, which included being the liaison between the JDPG (youth section of the German Physical Society) and the association of physics student bodies.

2019
2014



Member of the student council

FACULTY OF PHYSICS, UNIVERSITY OF GÖTTINGEN · Göttingen, Germany 📍

Included the representation of the students of the faculty, as well as the organisation of various events such as the orientation week, summer parties etc. From 2015 to 2016 I was spokesperson.

2019
2014



Member of various commissions including the faculty board

FACULTY OF PHYSICS, UNIVERSITY OF GÖTTINGEN · Göttingen, Germany 📍

I represented the physics students on the board and in the commissions. During the time, one major and several minor changes of the course of study took place.

SELF-EDUCATION

June 2023



Carpentries Instructor Training

CARPENTRIES 📄

Certification to become an Instructor at Software, Library or Data Carpentries Workshops
<https://carpentries.org/workshops/>

September
2022



Manim Course

UNIVERSITY OF GÖTTINGEN 📄

One week course using Jupyter Notebooks on the Python library *Manim* to create mathematical animations.

<https://flyingframes.readthedocs.io/en/latest/>

2021



Fast Forward: project management and productivity training for researchers

MIND MATTERS 📄

<https://mindmatters.pro/fastforward/>

2021



Resilience Course for Researchers

MIND MATTERS 📄

<https://mindmatters.pro/personal-resilience-indicator/>