

Desmond Kabus



Personal Data

pronunciation: /dɛzmənd ka:bʊs/ ‘DEZ-mint KAH-boos’

citizenship: German

Education

02/2021 – 01/2025: *KU Leuven and Leids Universitair Medisch Centrum*
PhD in applied mathematics and medicine

10/2016 – 09/2019: *Ruhr-Universität Bochum*
Master of Science in Physics with distinction (overall grade 1.0)
major: plasma physics, minor: computational physics, machine learning

title of the master’s thesis: *‘Analysis of Parametric Level Set Functions for the Representation of Geometry in the Optimal Control of Reaction-Diffusion Systems’*

keywords: cardiology, bi- and mono-domain description of muscle tissue, computational physics, optimisation, machine learning, solution of inverse problems, adjoint state method, finite differences

institute: Theoretical Physics I (Computational Plasma Physics), Prof. Dr. Rainer Grauer

08/2015 – 01/2016: *Stockholms Universitet*
semester abroad in Sweden funded by an ERASMUS grant

10/2013 – 09/2016: *Ruhr-Universität Bochum*
Bachelor of Science in Physics (overall grade 1.8)

title of the bachelor’s thesis: *‘Comparison of Phase Field and Interpolation Methods for the Representation of Geometries in the Numerical Analysis of Reaction-Diffusion Systems’*

institute: Theoretical Physics I (Computational Plasma Physics), Dr. Jürgen Dreher

2013: *Landfermann-Gymnasium Duisburg*
Allgemeine Hochschulreife (Abitur) – general qualification for university entrance (overall grade 1.2)

Teaching Experience

since 2019: *Segelsport-Interessentengemeinschaft an der Ruhr-Universität Bochum*
sailing instructor for internal waters

04/2019 – 08/2019: *Ruhr-Universität Bochum*
tutor for the lecture *theoretical mechanics*

04/2016 – 08/2016: *Ruhr-Universität Bochum*
manager of an experimental project of physics students

04/2016 – 08/2016: *Ruhr-Universität Bochum*
instructor for a physics lab course for geoscientists

04/2015 – 08/2015: *Ruhr-Universität Bochum*
tutor for the lecture *Electromagnetism and Optics*

10/2014 – 02/2015: *Ruhr-Universität Bochum*
tutor for the lecture *Physics for Biologists II*

10/2014 – 02/2015: *Ruhr-Universität Bochum*
tutor for the lecture *Mechanics and Thermodynamics*

Work Experience

01/2020 – 02/2020: *Talley's Blenheim*
aquacultural work

10/2019 – 12/2019: *Far North Blueberries*
agricultural work

03/2017 – 04/2018: *Nachhilfe-Kolleg Bochum-Linden*
private tutor in mathematics and physics

10/2012 - 11/2012: *mse Software GmbH Hattingen*
student internship at a technology company

07/2011: *Kosmos-Apotheke Bochum*
student internship at a pharmacy

Cultural Experience

09/2019 – 04/2020: *working holiday* in New Zealand
exchange of culture and language

11/2010, 03/2011: *Russell High School*
exchange of culture and language with a school in the US state of Kansas

Languages

German: first language

English: proficient in speech and writing

reference level C2 in accordance with CEFR (certificate for B2 included in Abitur)

Dutch: elementary knowledge

Swedish: elementary knowledge

Latin: proficiency certificate awarded in 07/2010

Classical Greek: proficiency certificate awarded in 07/2012

Technical Skills

programming languages: C, C++, C#, Python, Lua, LaTeX, Matlab, Haskell, (ba)sh, HTML, CSS, JavaScript, Java, Godot

software: GNU/Linux, OpenMP, Windows, Office

Hobbies

video game design and development, cycling, sailing, rowing, travelling