# FABIAN SCHUHMANN

## PERSONAL INFORMATION

Born in Freising, Germany, 7th May 1991

email fabian.schuhmann@uni-oldenburg.de

website fabianschuhmann.github.io

### CURRENT EMPLOYMENT

PhD student

2020-now  $\cdot$  Carl von Ossietzky University Oldenburg  $\cdot$  PhD student in the group of Prof. Dr. Ilia A. Solov'yov  $\cdot$  Thesis topic: **Development of theoretical and computational methods for biophysical applications** 

#### **EDUCATION**

Master of Science

2017-2019 · Ruhr University Bochum · Faculty of Mathematics Thesis: Dynamics of billiards with emphasis on the length of the shortest periodic billiard trajectory

Bachelor of Science

2013-2016 · Ruhr University Bochum · Faculty of Mathematics Thesis: Das Brunn-Minkowski Theorem und die isoperimetrische Ungleichung

Bachelor of Science

2011-2016 · Ruhr University Bochum · Faculty of Economics Thesis: Globaler Umweltschutz als Problem der privaten Bereitstellung eines öffentlichen Gutes

## **PUBLICATIONS**

The Transition of Photoreceptor Guanylate Cyclase Type 1 to the Active State

Manisha Kumari Shahu, Fabian Schuhmann, Alexander Scholten, Ilia A. Solov'yov, Karl-Wilhelm Koch

International Journal of Molecular Sciences 2022, Volume 23, Issue 7, p. 4030

EXPLORING POST-ACTIVATION CONFORMATIONAL CHANGES IN PIGEON CRYPTOCHROME 4

Fabian Schuhmann, Daniel R. Kattnig, Ilia A. Solov'yov

The Journal of Physical Chemistry B 2021, Volume 125, Issue 34, p. 9652-9659 (chosen for cover)

NAVIGATION OF MIGRATORY SONGBIRDS: A QUANTUM MAGNETIC COMPASS SENSOR Siu Ying Wong, Anders Frederiksen, Maja Hanić, Fabian Schuhmann, Gesa Grüning, P. J. Hore, Ilia A. Solov'yov

Neuroforum 2021, Volume 27, Issue 3, p. 141-150

Introducing Pep McConst—A user-friendly peptide modeler for biophysical applications

Fabian Schuhmann, Vasili Korol, Ilia A. Solov'yov

Journal of Computational Chemistry 2021, Volume 42, Issue 8, p. 572-580

## TEACHING EXPERIENCE

Teacher 2021 · Carl von Ossietzky University Oldenburg · In charge of a two-weeks mathematics crash course to bridge the gap between school mathematics and university mathematics Tutor2020 · Carl von Ossietzky University Oldenburg · Mathematical Modelling for future teachers · summer term 2020 Tutor 2017-2019 · Ruhr-University Bochum Mathematics for Biologists · winter term 18/19 Mathematics for Engineers II · summer term 18 Mathematics for Engineers I  $\cdot$  winter term 17/18 Assistent 2016-2018 · Hochschule Bochum · 'Institut für Mathematik und Technik<br/>didaktik'. **Tutor** 2015-2019 · Hochschule Bochum · Mathematics for Economists

EXTENSIVE STAYS

## OTHER QUALIFICATIONS

Workshops and additional training

Workshop on finances and booking the public sector

Trainer licence C for general sports

Workshop to teaching mathematics by ZAB at Ruhr-University Bochum

Voluntary work

2015-2018 · Member of the Faculty Council Mathematics

Ruhr-University Bochum

2014-2018  $\cdot$  Member of the student representations Mathematics

Ruhr-University Bochum

2010-2011 · Voluntary Social Year CVJM Westbund e.V. Wuppertal

Languages

German · Native

English · Fluent

Computer Skills

LaTeX · Advanced

Python · Advanced

Linux · Advanced

C++ · Basic SLURM · Basic

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