# FABIAN SCHUHMANN

## PERSONAL INFORMATION

*Born in Freising, Germany,* 7th May 1991

*email*     fabian.schuhmann@uni-oldenburg.de

## CURRENT EMPLOYMENT

2020-now   ·   Carl von Ossietzky University Oldenburg   ·   research assistant   ·   PhD student in the group of Prof. Dr. Ilia A. Solov'yov   ·   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

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

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

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

EXPLORING POST-ACTIVATION CONFORMATIONAL CHANGES IN PIGEON CRYPTOCHROME 4   ·   Fabian Schuhmann, Daniel R. Kattnig, Ilia A. Solov'yov

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

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

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

INTRODUCING PEP McCONST—A USER-FRIENDLY PEPTIDE MODELER FOR BIOPHYSICAL APPLICATIONS   ·   Fabian Schuhmann, Vasili Korol, Ilia A. Solov'yov

## PRESENTATIONS

| | |
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| *ERC Quantum Birds* 2022 Oxford UK | CONFORMATIONAL CHANGES IN PIGEON CRYPTOCHROME 4 |
| *DySoN-ISACC* 2021 *Santa Margherita Ligure Italy* | VIKING AND ITS FEATURED MULTISCALE TOOLS |
| *Topical Meeting* 2020 *Kopenhagen Denmark* | USER-FRIENDLY PEPTIDE MODELER FOR BIOPHYSICAL APPLICATIONS |

## TEACHING EXPERIENCE

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|---|---|
| *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 |
| *Tutor* | 2020 · 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 · winter term 17/18 |
| *Assistent* | 2016-2018 · Hochschule Bochum · 'Institut für Mathematik und Technikdidaktik'. |
| *Tutor* | 2015-2019 · Hochschule Bochum · Mathematics for Economists |

## EXETENSIVE STAYS

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|---|---|
| *Visiting* | 05/2022 · Living Systems Institute Univery of Exeter · guest of Dr. Daniel Kattnig |

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 · 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

May 25, 2022