

# Benjamin F. Maier

## Curriculum vitae

### EDUCATION

---

2014–TODAY	<b>Humboldt University of Berlin</b> PHD PHYSICS <i>ongoing</i>
2014	<b>Humboldt University of Berlin</b> M.Sc. PHYSICS <i>final grade: 1.2, thesis: 1.0</i>
2011–12	<b>Utrecht University, NL</b> ERASMUS <i>10 months visit</i>
2011	<b>Humboldt University of Berlin</b> B.Sc. PHYSICS <i>final grade: 1.7, thesis: 1.0</i>
2008	<b>Sartre-Gymnasium, Berlin-Hellersdorf</b> A-LEVEL <i>final grade: 1.2, intensive courses: Physics, Computer Science</i>

### WORKING EXPERIENCE

---

Self-employed	SINCE 2015
<b>Data Scientist</b>	
Department of Physics (HU Berlin)	2013 – 2014
<b>Teaching Assistant</b>	
course: Classical Mechanics and Introduction to Thermodynamics	
IfG – Institute for Scientific Instruments	2010 – 2011
<b>Student Assistant</b>	
GUI development for a color-resolved X-ray camera with interactive periodic table (C++ and Qt)	
Department of Physics (HU Berlin), AG PHÄ	2010
<b>Research Internships</b>	
two internships for the implementation of Ewald's method	
Department of Medicine (HU Berlin): Charité	2009 – 2010
<b>Teaching Assistant</b>	
TA for the Physics lab class of medicine freshmen	

### ADDITIONAL TEACHING EXPERIENCE

Deutsche Schülerakademie	2016
<b>Teacher</b>	
three week summer school course on "Network Science and Complex Systems" for gifted high-school students	
Student Association for Physics (HU Berlin)	2013
<b>Prep Course Computational Physics</b>	
one lecture and a tutorial class to prepare sophomores for the bachelor's course "Computational Physics"	

2009

Student Association for Physics (HU Berlin)

#### *Recap Course Mathematics*

one lecture and a tutorial class to give a recapitulation of school mathematics in advance to official lectures

📍	RKI, Nordufer 20, 13353 Berlin
☎	030 - 18754-0
✉	bfmaier@physik.hu-berlin.de
🌐	benmaier.org

### SCIENTIFIC WORK

---

PUBLICATIONS	(co-)author of two publications → website
TALKS	presenter on multiple conferences → website
THESES	M.Sc.: Thermophoresis in Liquids and its Connection to Equilibrium Quantities B.Sc.: Simulations of Dyon Configurations in SU(2) Yang-Mills Theory

### AWARDS & SCHOLARSHIPS

---

2014	<b>Recipient of the HU Berlin Research Track Scholarship</b>
2011-2014	<b>Fellow of the German National Academic Foundation (SDV)</b>
2008	<b>DPG award</b> – A-Level exam
2007	<b>DPG award</b> – intensive course physics

### VOLUNTARY WORK & FREE TIME

---

I have participated in voluntary activities in the department's student association since 2008. Responsibilities besides others: re-designing the department's study regulations together with professors, partial organisation of a student association conference (ZaPF 2010), partial organisation of numerous freshmen introduction weekend trips, handling the association's finances, mentoring for freshmen, design and implementation of various web pages. From 2015 to 2016 I have given personal lessons in math and programming to a teenager of a less fortunate social background in the Fibonacci program.

In my free time I am an avid boulderer and climber, like to make and to listen to electronic music or play classical guitar.

### LANGUAGES

---

GERMAN	native
ENGLISH	fluent (TOEFL IBT, score 106)
FRENCH	basic (A2)

### IT KNOWLEDGE

---

OS	Linux, Mac OSx, Windows
SCIENCE	Matlab, Mathematica, numpy, scipy
DEVELOPMENT	Python, C, C++, Qt, bash, MySQL, PostgreSQL, HIVE
OFFICE	LibreOffice, MS Excel, $\LaTeX$
WEB	PHP, HTML, CSS, JS (D3.js and Phaser.js)
GRAPHICS	InkScape, Gimp, Graphic (iDraw), Omnigraffle