

Curriculum Vitae

Philipp BRAUN

Date of Birth:	12 November 1985	Address:	Phone: +49 176 63651644
Place of Birth:	Neumarkt i.d.Opf	Marienroggenweg 51	Email: braunp@in.tum.de
Nationality:	German (EU citizenship)	18147 Rostock	

EDUCATION

OCT 2011	M.Sc., Applied & Engineering Physics	Technische Universität München
- SEP 2013	Laurea Magistrale, Materials Science	University of Turin
(expected)	Master 2, Chemistry	University of Montpellier 2
	CURRENT GPA: 1.7 (German grades range from 1.0 (excellent) to 5.0 (fail))	
	Erasmus Mundus Master programme Materials Science Exploring Large Scale Facilities (MaMaSELF) leading to a triple degree	
OCT 2009	B.Sc., Informatics	Technische Universität München
- SEP 2012	Application Area: Physics	
	GPA: 1.8, Thesis title: "Probe position refinement in X-ray ptychography"	
	Advisor: Prof. Thomas Huckle (TUM Informatics), Pierre Thibault, PhD. (TUM Physics)	
OCT 2008	B.Sc., Physics	Technische Universität München
- SEP 2011	Specialization Area: Condensed Matter Physics	
	GPA: 2.2, Thesis title: "Development and analysis of a momentum spectrometer for charged particles emitted after the photo double ionization of ethyne and ethylene"	
	Advisor: Dr. Thorsten Weber (LBNL), Prof. Peter Müller-Buschbaum (TUM)	
APR 2006	Associate Engineer, Computer Systems and Automation	Siemens Technik Akademie
- MAR 2008	GPA: 1.0	Erlangen, Germany
MAY 2005	Abitur,	Melanchthon Gymnasium
	GPA: 1.4	Nuremberg, Germany

WORK EXPERIENCE

FEB 2013	Research Intern	cSAXS beamline, PAUL SCHERRER INTITUTE
- SEP 2013	Coherent Diffractive Imaging	Villigen, Switzerland
(expected)	Masters Student. Mixed State Reconstruction with X-Ray Ptychography, Advisors: Dr. Andreas Menzel, Dr. Pierre Thibault	
JUL 2012	Research Intern	Coherent Imaging Division, CFEL, DESY
- SEP 2012	Coherent Imaging with FELs	Hamburg, Germany
	Participant in the DESY Summer Programme. 3D phase retrieval algorithms. Binary classification of single-particle diffraction patterns from FELs. Advisors: Dr. Anton Barty, Prof. Henry Chapman	
JUL 2011	Research Intern	AMOS Group, LAWRENCE BERKELEY NATIONAL LABORATORY
- SEP 2011	Atomic and Molecular Physics	Berkeley, U.S.
	Participant in the DAAD RISE programme. Development, simulation and resolution analysis of a 3D momentum spectrometer for charged particles emitted after the photo double ionization of ethyne and ethylene. Help with setup of the experiment at beamline 10.0.1 of the Advanced Light Source. Advisor: Dr. Thorsten Weber	
OCT 2008	Software Engineer	INTERASCO GmbH
- NOV 2009	IT Solutions and Services	Munich, Germany
	Helped defining the architecture for a newly started long term project. Developed an easy to use multithreading framework. Coached the team in using the framework and provided thorough documentation.	
APR 2008	Junior Developer	SWINTON COLLONADE LTD.
- OCT 2008	Insurance and Financial Services	Manchester, U.K.
	Developed enterprise scale object oriented web applications. Developed website frontend with javascript, DHTML, webservices. Monitored website performance and troubleshot defects out of regular working hours.	
OCT 2007	Software Developer Intern	SIEMENS STANDARD DRIVES
- MAR 2008	Manufacturing & Automation	Congleton, U.K.
	Developed an application to streamline tracking of defective circuit boards and increase item throughput in the adjoining factory. Developed an application to automate a small assembly line.	

COMPUTER SKILLS

Programming: WEB PAGES (Expert), WINDOWS APPLICATIONS (Expert), Qt (Basic)
DATABASE DESIGN (Expert)
Programming Languages: C# (Expert), VISUAL BASIC (Expert), C/C++ (Expert)
SML (Intermediate), SQL (Intermediate), PERL (Basic),
HTML (Intermediate), Python (Intermediate)
Computer Algebra Programs: MATHEMATICA (Intermediate)
Operating Systems: WINDOWS (Expert), LINUX (Intermediate)
Office: \LaTeX , Office-Suite

LAB EXPERIENCE

BASIC LAB COURSE 1	<ul style="list-style-type: none">- Oscillations and chaos - Capillary viscosimeter- Determination of molar mass - Constitutive equation of real gases- Determination of sonic velocity - Dissociation and freezing point depression of KNO_3
BASIC LAB COURSE 2	<ul style="list-style-type: none">- Determination of electron charge - Bridge circuit- Creation of ultra high vacuum, measurement of vacuum pressure- Measurement of transmission curves on the oscilloscope- Characteristic lines of transistors- fuel cell characteristics
BASIC LAB COURSE 3	<ul style="list-style-type: none">- measurement and handling of radioactive materials- measurement of electromagnetic fields- diffraction and refraction of light- X-rays: characteristic and continuous spectrum, generation- geometrical optics: lenses, lense systems, principal plane, autocollimation, focal distance- Franck-Hertz-Experiment
ADVANCED LAB COURSE	<ul style="list-style-type: none">- x-ray fluorescence spectrometry- atomic force microscopy- molecular motors. fluorescence microscopy- plasma interferometry, He-Ne lasers, laser resonator, Fabry-Perot-interferometer- organic photovoltaic cells- surface plasmons- Mössbauer Effect- Lasers and nonlinear optics- Fourier transform holography
BACHELOR THESIS	<ul style="list-style-type: none">- synchrotron radiation- 3rd generation synchrotrons

MILITARY SERVICE

JUL 2005 | Private First class at GERMAN AIRFORCE, Landsberg a. Lech
- MAR 2006 | *Air raid defences*

LANGUAGES

ENGLISH: Fluent
SPANISH: C1 Level
ITALIAN: A2 Level
FRENCH: A1 Level

INTERESTS AND ACTIVITIES

Technology, Philosophy of Science, University Choir, Programming, Travelling