



# Bijan Chokoufe Nejad

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## Education

- 2014–2016 **Doctoral Studies (Dr. rer. nat.)**, *DESY Hamburg / University of Würzburg*.  
Joint venture with the research center DESY of the Helmholtz society for the further development of WHIZARD and O'MEGA.
- 2011–2013 **Master of Science with Honors in Physics**, *University of Würzburg*, 1.1.  
Chosen for the graduate program FOKUS Physik of the elite network of Bavaria.  
Graduating in more than one semester shortened period of study.
- 2009–2012 **Bachelor of Science in Physics**, *University of Würzburg*, 1.2.  
Switched in the second semester from nanostructure technology to physics, to get a deeper understanding of the underlying mathematical and theoretical structures of nature.  
Compressed studies, partly with lectures in the semester break, to postpone master lectures.
- 2008–2009 **Military duty**, *Bundeswehr*, Weissenfels, Horb a.N. and Kempten.  
Special training for CBRN defense in the Joint Medical Service.
- 2002–2008 **Abitur**, *Schiller-Gymnasium*, Pforzheim, 1.0.  
Class representative from 10th to 13th grade.  
Local physics prize of the DPG for outstanding achievements.

## Doctoral thesis

title *Resummation of Soft Radiation from Heavy Particles in Monte Carlo Event Generators*  
supervisor Prof. Dr. T. Ohl and Dr. J. Reuter

## Master thesis

title *Numerical Calculation of Multi-Jet Cross Sections*  
supervisor Prof. Dr. T. Ohl  
Improvement of existing calculations by means of a virtual machine in Fortran as well as refined Monte Carlo techniques for the multi purpose event generator WHIZARD.

## Bachelor thesis

title *Landau levels in bilayer quantum spin Hall systems*  
supervisors Prof. Dr. B. Trauzettel and Dr. P. Michetti

Analytic calculation of the energy levels which occur in the presence of strong magnetic fields for double layer topological insulators.

## Experience

- 2013 **Teaching assistant**, *University of Wuerzburg*.  
Undergraduate lectures in theoretical mechanics and quantum mechanics.
- March–April 2013 **Research internship**, *Max Planck Institute for Physics*, Munich, Dr. Thomas Hahn.  
Implementation of check-pointing in C for the CUBA library which offers different methods for multidimensional numerical integration.
- April–June 2009 **Internship**, *Fraunhofer Institute for Interfacial Engineering and Biotechnology*, Stuttgart.  
Production and analysis of dispersions of carbon nanotubes as well as buckypaper.

## Seminars

- November 2012 **Workshop on goal and value oriented self management**, *Elite network of Bavaria*, Stein.
- September 2012 **Summer School on Efficient Algorithms in Computational Physics**, *DPG Conference Center*, Bad Honnef.
- September 2012 **Summer University on Plasma Physics and Fusion Research**, *Max Planck Institute for Plasma Physics*, Garching.

## Languages

- German **Native**  
English **Very good**  
French **Basic**

## Computer skills

- Languages C, Fortran95/2003, Python, O'Caml, Java  
Software Mathematica, Matplotlib, L<sup>A</sup>T<sub>E</sub>X, Inkscape, MS Office  
OS Linux, Windows XP, Vista, 7