

Tobias Marcel WAGNER

Personal Data

PLACE AND DATE OF BIRTH: Wiesbaden | June 9th 1997

EMAIL: twagner@students.uni-mainz.de

EDUCATION

FEB 2019 -

Graduate student in Physics at the Johannes Gutenberg - Universität, Mainz Scheduled (Oct 2020) Master thesis on magnetoelastic effects of thin antiferromag-

netic layers on ferromagnetic substrates,

analytic analysis and numerical simulation of hybrid systems | Advisor: Dr. Everschor-Sitte and Prof. Dr. Gomonay

FEB 2019

Bachelor of Science in Physics, Johannes Gutenberg - Universität, Mainz Thesis: "Clock Transmission for the Mu3e Experiment" | Advisor: Prof. Dr. Berger Design, development and testing of a multichannel, any fequency, any output, optical to electric clock transmission PCB

THESIS: 1.0, GPA: 1.7

Mar 2016

Abitur, Theresianum Gymnasium, Mainz

German highschool graduation exam and university entrance certificate | Private

high school of the roman catholic diocese Mainz GPA: 1.3, Honors: Physics, Mathematics, English

Research Experience

APR 2020 - Research assistant in the group of Dr. Everschor-Sitte TWIST at the Institute

of Physics at the Johannes Gutenberg - Universität, Mainz

Analytic analysis of spin current induced domain wall motion in antiferromagnets and magnetoelastic effects of thin antiferromagnetic layers on ferromagnetic sub-

strates in hybrid systems together with Prof. Dr. Gomonay

OCT 2019 - | Research assistant in the group of Prof. Dr. Denig at the

APR 2020 Institute of Nuclear Physics at the Johannes Gutenberg - Universität, Mainz

Simulation of muonic field interactions for the BESIII experiment,

Efficiency studies for Bhabha scattering at BESIII

APR 2018 - Research assistant in the group of Prof. Dr. Berger at the

SEPT 2018 | Institute of Nuclear Physics Johannes Gutenberg - Universität, Mainz

Electronics development for the Mu3e experiment

Oct 2016 - Operator of the Mainz Microtron Accelerator

MAR 2018 Operation of the 1.5 GeV microtron cascade during night- and weekend shifts

MAR 2015- The physical principles of X-ray and NMR in medical applications,

MAR 2016 Voluntary special learning and research high school term paper in physics

In cooperation with Dr. BÜMLER, Institute of Physics at the Johannes Gutenberg

- Universität, Mainz

Subsequent early study as high school student at the Johannes Gutenberg - Univer-

sität, Mainz (three semesters)

RESEARCH INTERESTS

Condensed Matter Theory Antiferromagnetic Spintronics AFM-FM Hybrid Systems Topological Excitations and Skyrmions Machine Learning

Teaching Experience

JUL 2019 Tutor for Mathematical methods for physics

MAR 2018 Tutor for Signal Analysis

CERTIFICATES

Feb 2018 Third place in the newcomer ranking at the 15. Carnival Dancing Tournament of the

Johannes Gutenberg - Universität, Mainz

MAR 2016 High school graduation prize in physics from the German Physical Society (DPG)

JUL 2015 Participation at the mathematical modelling workshop for students and teachers.

Topic: Bioacustics. Organizer: Dr. Martin Bracke, TU Kaiserslautern

Jun 2013 Diplôme D'Études En Langue Française DELF A2, French Language certificate

MAR 2013 Rheinland-Palatinate mathematics tournament round 3
Jun 2012 Rheinland-Palatinate mathematics tournament round 2

JAN 2011 Third prize Rheinland-Palatinate mathematics tournament round 1

LANGUAGES

GERMAN: Mothertongue English: Fluent

French: Basic Knowledge
Latin: Advanced Latinum

COMPUTER SKILLS

 $Languages \quad Python~(4y), Java~(4y), Wolfram~Mathematica~(4y), LATEX(6y), C++~(1y), Fortran~(1y)$

Electronics PCB Design, Signal Analysis

Operating Systems Linux (open Suse, Ubuntu, Scientific Linux, Fedora), Mac OS, MS Windows

SOCIAL ACTIVITIES

DEC 2013 Internship at St. Josefs-Hospital Wiesbaden, Orthopedic ward

LEISURE ACTIVITIES

Sports: Dancing, Fitness Training, Jogging, Cycling, Hiking, Canoeing, Outdoor Climbing

Piano Playing Photography Travelling Modelbuilding

Tobias Wagner Mainz, 28st May, 2020