

# Andreas R. Weiden

Date of Birth December 10<sup>th</sup> 1989 in Cologne, Germany

### Education

2000

<sup>8</sup>**PhD (Physics)**, *University of Zürich*, Zürich, LHCb. estimated date of graduation: 31.12.2018

Master of Science (Physics), Ruprecht-Karls University, Heidelberg. Specialization in Experimental Particle Physics

Bachelor of Science (Physics), Ruprecht-Karls University, Heidelberg.

Highschool Year Abroad, Ord Jr.-Sr. Highschool, Ord, Nebraska, USA.

**Abitur (Highschool Diploma)**, *Gymnasium*, Erftstadt-Lechenich. Specialization in Physics and Mathematics

## PhD Thesis

Title Double-differential inclusive  $Z/\gamma^* \to \mu\mu$  production cross-section at LHCb

Supervisors Professor Dr. Ulrich Straumann & Dr. Katharina Müller

## Master Thesis

Title Measurement of direct CP-violation in prompt  $D^0 \to K^-K^+$  and  $D^0 \to \pi^-\pi^+$  decays at LHCb

Supervisors Professor Dr. Ulrich Uwer & Professor Dr. André Schöning

Description Measurement of  $\Delta A_{CP} \equiv A_{CP}(KK) - A_{CP}(\pi\pi)$  using 2011 and 2012 data. Uses

prompt  $D^{*\pm} \to D^0(\overline{D}^0)\pi_s^{\pm}$  decays to tag the initial flavor.

#### Bachelor Thesis

Original Title Zeitintegriertes Verhältnis von  $D^0 o K^+\pi^-$  zu  $D^0 o K^-\pi^+$  Zerfällen bei LHCb

Supervisors Professor Dr. Ulrich Uwer & Professor Dr. André Schöning

Description Measurement of the time-integrated ratio of  $D^0 o K^+\pi^-$  and  $D^0 o K^-\pi^+$  decays,

which is used for the time-dependent measurement of  $D^0$ - $\bar{D^0}$  oscillations.

	Experience
L L C 2012	Vocational
Jul – Sep 2013	Summer Student, H1, Deutsches Elektronen-Synchrotron (DESY), Hamburg, 8
	weeks. Using the elastic $\gamma^* p \to J/\psi p$ cross-section to probe the small x gluon density.
2014	Lab Course Tutor, <i>Physikalisches Institut</i> , Heidelberg.
2012	Physics lab course for physicists (Aug 2012) and physics minors (Feb 2013, Feb 2014).
Dec 2011 – Apr 2012	Intern, LHCb, Physikalisches Institut, Heidelberg, prior to Bachelor thesis. Background studies in wrong-sign and right-sign $D^0$ -decays.
Jun – Jul 2009	<b>Summer Intern</b> , FOPI, Gesellschaft für Schwerionenforschung (GSI), Darmstadt, 6 weeks.
	Building and testing of a prototype differential RPC using cosmic rays.
Jun 2008	<b>Summer Intern</b> , <i>WASA</i> , <i>Forschungszentrum Jülich</i> , Jülich, 2 weeks. Light-attenuation in aging plastic scintillators.
	Miscellaneous
2015	<b>Treasurer (Bundesvorstand für Finanzen)</b> , young German Physical Society (junge Deutsche Physikalische Gesellschaft, jDPG).  Administration of finances for the german-wide jDPG, a working group of the DPG (German
0014	Physical Society).
2014	<b>Chairman</b> , Local organization committee for the "International Conference of Physics Students" (ICPS) 2014, Heidelberg.
	Annual conference for physics students which is entirely organized by students, held by IAPS, 2014 organized by the jDPG.
2014	<b>Treasurer</b> , Regional Group Heidelberg of the jDPG and YoungMinds Section Heidelberg of the EPS, in personal union.
	Administration of finances, applying for financing at the jDPG or EPS. Active member since Mar 2011. As a member, organization of excursions and seminars preparing students studying physics for jobs in research or in commerce.
2012	Aide, Explore Science, Klaus-Tschira Foundation.
2010	Stand and experiments supervision during annual science fair which is aimed at making children interested in science and mathematics.
	Computer skills
Basic	FORTRAN, MATHEMATICA
Intermediate	C, HTML, PHP, R, LATEX, Microsoft Windows
Advanced	PYTHON, C++, ROOT, ROOFIT, GNU/Linux
	Languages
German	Mothertongue
English	Fluent Cambridge Certificate in Advanced English (CAE), European Level C1
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European Level B1

Latinum

Russian Basic

Latin Basic