

Dr. Benjamin Koch

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RESEARCH INTERESTS Asymptotic Safety
Physics beyond the standard model
Quantum gravity at the Terascale

EDUCATION **2007**, PhD
Title: Black hole production and graviton emission
in models with large extra dimensions
At: Frankfurt International Graduate School of Science and
Institute of Theoretical Physics in Frankfurt, Germany

2003, Diploma
Title: Einschleifenrechnungen zur tiefinelastischen
Neutrino-Nukleon-Streuung im MSSM
At: Max Planck Institute for Theoretical Physics, and
Technical University Munich, Germany

2001, One semester of language study
At: Universidad de Complutense in Madrid, Spain

1996, School leaving examination (Abitur)
At: Theodor Heuss Gymnasium Nördlingen, Germany

WORKING EXPERIENCE **Since 2012**, Assistant professor
At: Pontificia Universidad Católica de Chile, Santiago, Chile

2008-2011, Postdoc
At: Pontificia Universidad Católica de Chile, Santiago, Chile

2007-2008, Postdoc
At: Institute of Theoretical Physics in Frankfurt, Germany

2004-2007, Teaching assistant
At: Institute of Theoretical Physics in Frankfurt, Germany

2001, Internship
On: Simulation and construction of a water Cherenkov detector
At: Max Planck Institute for Physics in Munich, Germany

1996-1997, Civilian service

At: Lebenshilfe Nördlingen, Germany

TEACHING
EXPERIENCE

Lecturer and Professor at Pontificia Universidad Católica

2013-II Modern Physics
2013-I General Physics for College
2013-I Modern Physics
2012-II Electricity and Magnetism for Engineers
2012-I General Physics for College
2011-II Electricity and Magnetism
2011-I General Physics for Engineers
2010-II Introduction to Particle Physics
2010-I Introduction to Physics
2009-II Introduction to Physics
2009-I Quantum Field Theory
2008-II Introduction to Particle Physics

Assistant at University of Frankfurt

2007-I Statistical Physics
2006-I Quantum mechanics I
2005-I Elektrodynamics
2004-II Theoretical mechanics II
2004-I Theoretical mechanics I

GRANTS AND
PRICES

2013, Honorable Mentioned Price, Karl Schwarzschild Meeting

Presentation on: Black hole solutions with running gravitational couplings

2012-2016, Principal Investigator, Fondecyt Regular 1020360

Theory and Phenomenology at the Terascale

2012-2015, Senior Researcher, Anillo 10201

Anillo Atlas Andino - High Energy Particle Physics

LANGUAGES **German:** native language

English: fluently

Spanish: fluently

Latin: reading only

COMPUTING SKILLS **Programming and editing:** C++, Fortran, Perl, Root, html, and Latex

Operating systems: Mac OSX, Linux, and Windows

OTHER INTERESTS Gymnastics, reading, and basketball

Santiago, October 15, 2013