# Dr. Benjamin Koch

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RESEARCH INTERESTS LHC phenomenology

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

2012-I Undergraduate course, General Physics for College (Spanish)

2011-II Undergraduate course, Electricity and Magnetism (Spanish)

2011-I Undergraduate course, General Physics for Engineers (Spanish)

2010-II Undergraduate course, Introduction to Particle Physics (Spanish)

2010-I Undergraduate course, Introduction to Physics (Spanish)

2009-II Undergraduate course, Introduction to Physics (Spanish)

2009-I Graduate course, Quantum Field Theory (English)

2008-II Undergraduate course, Introduction to Particle Physics (English)

### Assistant at University of Frankfurt

2007-I Undergraduate course, Statistical Physics (German)

2006-I Undergraduate course, Quantum mechanics I (German)

2005-I Undergraduate course, Elektrodynamics (German)

2004-II Undergraduate course, Theoretical mechanics II (English)

2004-I Undergraduate course, Theoretical mechanics I (German)

# RESEARCH GRANTS

#### 2012-2016, Fondecyt Regular 1020360

Theory and Phenomenology at the Terascale

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, June 14, 2012