

Curriculum vitae 1/3

Personal data:

Name: Dr. rer. nat. Dipl.-Phys. Harald Dimmelmeier
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Date and place of birth: 9 June 1972 in Regensburg, Germany
Citizenship: German



Academic education:

Nov. 2001: Doctoral degree in Physics, grade “magna cum laude” (= very good)
Thesis title: “General relativistic collapse of rotating stellar cores in axisymmetry”
Oct. 1998 – Nov. 2001: Enrolled as Ph.D. student at the Dept. of Physics of the *Technical University Munich*, Germany
Sept. 1998: Diploma degree in Physics, grade 1.0 “mit Auszeichnung” (with honors)
Thesis title: “Numerical calculations of hydrodynamic gravitational collapse and its observational consequences in scalar-tensor theories of gravity”
Aug. 1994 – May 1995: Academic year at the Dept. of Physics and Astronomy of the *University of Illinois* in Urbana-Champaign, U.S.A.
Study abroad scholarship, sponsored by the IAS program of the DAAD (German Academic Exchange Service)
GPA (grade point average): 4.7 of 5
Nov. 1991 – Sept. 1998: Enrolled as student at the Dept. of Physics of the *University of Regensburg*, Germany

Secondary education:

June 1991: Abitur degree, grade 1.3 (= very good)
1990, 1991: Facharbeit (mandatory independent research project) in Physics class on GaAlAs semiconductor lasers
Sept. 1982 – June 1991: Grammar school at the *Albrecht-Altdorfer-Gymnasium Regensburg*, Germany
Humanistic branch

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Research and professional experience:

- since May 2008: Expert for safety analysis of nuclear reactors at *AREVA NP GmbH* in Erlangen, Germany
3d computational fluid dynamics, probabilistic safety analysis
- Feb. 2007 – Mar. 2008: Marie Curie fellow at the Dept. of Physics at the *Aristotle University of Thessaloniki*, Greece
Marie Curie project “Relativistic Supercomputer Simulations for Gravitational Wave Asteroseismology” (IEF 040464) sponsored by the European Union
Numerical simulations, 3d computational fluid dynamics, magnetic fields, nuclear physics, black hole formation, pulsations in compact stars
- Nov. 2001 – Jan. 2007: Postdoctoral scientist at the *MPI for Astrophysics* in Garching, Germany
Special Research Collaboration SFB Transregio 7 “Gravitational Wave Astronomy” of the DFG (German Science Foundation)
Numerical simulations, 3d computational fluid dynamics, parallel supercomputing, spectral methods
WWW team for research group webpages
- Mar. 1999 – Mar. 2008: Part-time technical editor for the electronic journal “Living Reviews in Relativity” at the *MPI for Gravitational Physics* in Potsdam, Germany, and the *Heinz Nixdorf Center for Information Management* in Garching, Germany
Editing and electronic conversion of articles, software development, tutorials
- Sept. 1998 – Nov. 2001: Ph.D. research at the *MPI for Astrophysics* in Garching, Germany
Numerical simulations, 2d computational fluid dynamics, vector supercomputing
- Jan. 1997 – June 1998: Diploma research at the *MPI for Gravitational Physics* in Potsdam, Germany
Numerical simulations, 1d computational fluid dynamics
- Jan. 1997 – June 1998: Part-time student assistant at the *MPI for Gravitational Physics* in Potsdam, Germany
System administration, programming, WWW team for institute webpages
- Jan. 1995 – May 1995: Research in the Numerical Relativity Group of the *National Center for Supercomputing Applications (NCSA)* in Urbana-Champaign, U.S.A.
Numerical simulations, literature research
- Aug. 1993 – June 1996: Various part-time internships at the Regensburg branch of *Siemens AG*, Automotive Division
Designing, building and programming of test bench, development of numerical simulation tools, and testing in the Safety Electronics Group
- Aug. 1990, 1991, 1992: Various internships at the Regensburg branch of *Siemens AG*, Opto Semiconductor Division
Programming and testing in the Opto-Electronic Group
- 1988 – 1994: Miscellaneous other part-time jobs

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International professional travel:

since 1991: Regular project related working visits at universities and research institutes in France, Germany, Greece, Italy, Poland, Spain, U.K., and U.S.A.
Various invitations for seminar talks at universities and research institutes
Frequent attendance and presentations at international scientific conferences (about 5 times per year)

Language and computing skills:

Languages: German: native speaker
English: fluent (institute and publication language)
Greek, Spanish, French, Italian: basic knowledge

Computing skills: Experience with scientific parallel and vector supercomputing
Broad experience with Fortran, Perl, \LaTeX , HTML
Extendable knowlegde of C, C++, Java, XML, and MathML
Experience with visualization and data analysis tools (Amira, IDL) and mathematics packages (Mathematica, Maple), data mining
Profound knowledge of the UNIX/Linux system and environment (software installation, window managers, shell programming)
Version control software (SVN, CVS)
Standard Microsoft office software

Voluntary practicals: Various supercomputer tutorials and programming courses at the *Computing Center of the Max Planck Society (RZG)* in Garching and at the *Leibniz Computing Center (LRZ)* in Munich
Microcomputer practical at the *University of Regensburg*
Electronic practical at the *University of Illinois at Urbana-Champaign, U.S.A.*
Various computer science courses at the *University of Regensburg*
Several successful participations in Bundeswettbewerb Informatik (German Federal Computer Science Competition) for school students (1989 – 1992)

Miscellaneous:

Hobbies: Outdoor sports (Skiing, hiking, mountain biking, trekking, marathon running)
Electric guitar playing

1990 – 1994: Team guide of the German Catholic Scouts Organization (DPSG)

Existing letters of reference

Upon request I can provide the following letters of reference and certificates (in German):

Marie Curie postdoctoral fellowship

Aristotle University of Thessaloniki, Greece
Feb. 2007 – Mar. 2008

Postdoctoral scientist

Max Planck Institute for Astrophysics, Garching, Germany
Nov. 2001 – Jan. 2007

Technical editor

Living Reviews in Relativity
Max Planck Institute for Gravitational Physics, Potsdam, Germany
Mar. 1999 – Mar. 2008

Voluntary internship

Siemens Automotive, Regensburg, Germany
May 1996 – June 1996

Voluntary internship

Siemens Automotive, Regensburg, Germany
Aug. 1995 – Oct. 1995

Voluntary internship

Siemens Automotive, Regensburg, Germany
Aug. 1993 – Sept. 1993

Doctoral certificate

Technical University Munich, Germany
Nov. 2001

Diploma certificate

University of Regensburg, Germany
June 1998

Abitur certificate (grammar school graduation)

Albrecht-Altdorfer-Gymnasium Regensburg, Germany
July 1991

Addresses for additional letters of reference

The following persons offer to send a letter of reference upon request:

Prof. Dr. José A. Font-Roda
(long-time collaborator in science)

Associate Professor
Departamento de Astronomía y Astrofísica
Edificio de Investigación
Universidad de Valencia
Dr. Moliner, 50
E-46100 Burjassot (Valencia), Spain
j.antonio.font@uv.es
www.uv.es/daa

PD Dr. habil. Ewald Müller
(PhD thesis advisor,
long-time collaborator in science)

Research Group Leader
Max Planck Institute for Astrophysics
Karl-Schwarzschild-Straße 1
D-85741 Garching, Germany
ewald@mpa-garching.mpg.de
www.mpa-garching.mpg.de

Prof. Dr. Jérôme Novak
(long-time collaborator in science)

Assistant Professor
Laboratoire de l'Univers et de ses Théories
Observatoire de Paris – Meudon
F-92195 Meudon, France
Jerome.Novak@obspm.fr
www.luth.obspm.fr

Dipl. Phys. Lorenz Pfau
(former supervisor at Siemens AG,
Automotive Division)

Program Manager
Development Safety Electronics
Siemens VDO
Osterhofener Straße 19
D-93055 Regensburg, Germany
lorenz.pfau@siemens.com

Dipl. Ing. Anton Pschorr
(former supervisor at Siemens AG,
Opto Semiconductors Division,
long-time personal friend)

Senior Director Quality Management
OSRAM Opto Semiconductors GmbH
Leibnizstraße 4
D-93055 Regensburg, Germany
anton.pschorr@osram-os.com

Prof. Dr. Edward H. Seidel
(Diploma thesis advisor,
long-time collaborator in science)

Director
Center for Computation & Technology
Louisiana State University
Johnston Hall
Baton Rouge, LA 70803, U.S.A.
eseidel@cct.lsu.edu
www.cct.lsu.edu

Prof. Dr. Nikolaos Stergioulas
(long-time collaborator in science)

Assistant Professor
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Department of Physics
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