

Philipp Denzel

PERSONAL INFORMATION	Philipp Denzel Breitwiesstrasse 61 CH-8135 Langnau am Albis	Date of birth: 19/08/1991 Nationality: German Work permit: C
CONTACT INFORMATION	Institute for Computational Science University of Zurich (Y11F96) Winterthurerstrasse 190 CH-8057 Zürich	office: (+41) 44 635 5820 mobile: (+41) 76 211 1908 phdenzel@physik.uzh.ch www.ics.uzh.ch/~phdenzel
INTERESTS	general relativity, cosmology, computational astrophysics, hydrodynamics simulations, molecular dynamics simulations, dark matter, gravitational lensing, phase transitions and nucleation processes, computer science	
EDUCATION / POSITIONS	Institut für Computergestützte Wissenschaften, Universität Zürich PhD in Theoretical Physics (2016 - present) <ul style="list-style-type: none">• ongoing work in gravitational lensing, galactic dynamics, general relativity MSc in Computational Science spec. Astrophysics (2015 - 2016) <ul style="list-style-type: none">• Thesis Topic: <i>Radiation hydrodynamics of star formation: Infrared feedback in molecular clouds</i>• Supervisor: Romain Teyssier Universität Zürich BSc in Physics (2010 - 2014) <ul style="list-style-type: none">• Thesis Topic: <i>Molecular dynamics simulations of bubble nucleation</i>• Supervisor: Jürg Diemand	
SKILLS	Frameworks <ul style="list-style-type: none">• Strong proficiency: Python, Fortran, Java, Bash, Lisp, Git, L^AT_EX, MPI, OpenMP• Familiarity: C, C++, Cuda, HTML 5, CSS 3, Javascript, Matlab, Mathematica• Operating Systems: Unix, Windows, macOS Techniques <ul style="list-style-type: none">• High performance computing, supercomputer-generated data reduction pipelining and automation, computational fluid dynamics, adaptive mesh refinement, N-body simulation, Markov chain Monte Carlo methods Languages <ul style="list-style-type: none">• German, English (and basics in: Latin, French, Russian)	
PUBLICATIONS	<i>Molecular Dynamics Simulations of Bubble Nucleation in Dark Matter Detectors</i> , P. Denzel , J. Diemand, R. Angéilil, Phys. Rev. E 93, 013301, 11 January 2016	
WORKSHOPS AND CONFERENCES	<ul style="list-style-type: none">• <i>Academia Industry Modeling Week</i>, Universität Zürich & Eidgenössische Technische Hochschule Zürich, in Zürich, November 2015, contributed talk• <i>Swiss Cosmology Days 2017</i>, Universität Basel, in Basel, February 6-7 2017, attended	

- *CSZ retreat*, Universität Zürich & Eidgenössische Technische Hochschule Zürich, in Gwatt (Thun), August 22-24 2017, contributed talk (awarded 3rd place in Science Slam competition)
- *Swiss Cosmology Days 2018*, CERN & Universität Genf, at CERN (Geneva), February 5-6 2018, contributed talk
- *EWASS 2018*, European Week of Astronomy and Space Science, in Liverpool, April 3-6 2018, contributed talk

TEACHING EXPERIENCE

Spring	2018	Teaching Assistant, Scientific Computing
Fall	2017	Teaching Assistant, Introduction to Astrophysics & Cosmology
Spring	2017	Teaching Assistant, Computer Simulations I
Fall	2016	Teaching Assistant, Computer Simulations II
Spring	2016	Teaching Assistant, Scientific Computing
Spring	2014	Teaching Assistant, Physics II, Lab work
Fall	2013	Teaching Assistant, Physics I, Lab work

REFERENCES

Prof. Dr. Jürg Diemand	diemand@physik.uzh.ch	Bachelors Supervisor
Prof. Dr. Romain Teyssier	romain.teyssier@uzh.ch	Masters Supervisor
PD Dr. Prasenjit Saha	psaha@physik.uzh.ch	PhD Supervisor
Dr. Raymond Angélil	rangelil@physik.uzh.ch	Research colleague