



Dr. rer. nat. Tim Tugendhat

personal information

born 28 December 1986
in Ulm, Germany
nationality German
marital status single, no children

Career

since 2019 **Consultant**, *Senacor Technologies AG*.
Projects:
– overhaul and re-organisation of the overall banking management system for a German state bank, unified reporting platform: Business Analyst

education

- 2014–2018 **Ph. D.**, *Physics*, Ruprecht-Karls-Universität Heidelberg, Germany.
Member of Heidelberg Graduate School for Fundamental Physics (HGFSP) and International Max Planck Research School (IMPRS)
Title of thesis: “*On the Impact and Usefulness of Intrinsic Alignments of Galaxies in a Composite Model on Weak Lensing in Tomographic Surveys*”
- 2015 **visiting scientist**, Université de Genève, Switzerland.
Research project on galaxy intrinsic alignments in modified gravity
- 2010–2013 **M. Sc.**, *Physics*, Ruprecht-Karls-Universität Heidelberg, Germany.
Title of master’s thesis: “*On corrections of the Weak Lensing Angular Power Spectra due to Galaxy Redshift Clustering and the Resulting Estimation Bias in the Cosmological Parameters*”
- 2011–2012 **studying abroad**, Durham University, United Kingdom.
Research project titled “*On the evolution of dark matter haloes in quintessential dark energy models and possible effects on galaxy formation*”
- 2007–2010 **B. Sc.**, *Physics*, Ruprecht-Karls-Universität Heidelberg, Germany.
Title of bachelor’s thesis: “*On Cosmic Inflation and Large-Scale Structure’s Quantum Seeds*”
- 2006 **Abitur**, Humboldt-Gymnasium, Ulm, Germany.
Core subjects: German, English, Mathematics, Physics, History

published works

C. Kommer, T. Tugendhat, and N. Wahl. *Tutorium Physik fürs Nebenfach: Übersetzt aus dem Unverständlichen*. Springer Berlin Heidelberg, ISBN 9783662472446, 2015.

T. M. Tugendhat, R. Reischke, and B. M. Schaefer. Statistical separation of weak gravitational lensing and intrinsic ellipticities based on galaxy colour information. *ArXiv e-prints*, May 2018.

Tim M Tugendhat and Björn Malte Schäfer. Angular ellipticity correlations in a composite alignment model for elliptical and spiral galaxies and inference from weak lensing. *Monthly Notices of the Royal Astronomical Society*, 476(3):3460–3477, 2018.

teaching, popular science, outreach

- since 2019 **popular science**, freelance author.
- 2018 **science journalism**, editorial staff intern at “spektrum.de” and “Sterne und Weltraum”.
- since 2015 **social media**, YouTube channel and Facebook page “Physiktutorium”.
- since 2015 **textbook author**, co-author of university-level physics textbook “Tutorium Physik fürs Nebenfach”, Springer Spektrum publishing.
- 2015 **head tutor**, Heidelberg University, physics undergraduate lecture General Relativity.
- 2010–2017 **tutor**, Heidelberg University, various undergraduate physics and astronomy lectures as well as physics lab courses.
- 2008–2017 **student assistant**, Explore Science, yearly science fair for young adults.

work, internships, military service

- since 2014 **political party office**, managing Committee of SPD Heidelberg-Neuenheim.
- 2014 **internship**, Deutscher Bundestag, Lothar Binding MdB.
- 2013–2014 **private tutor**, “Unterrichtskreis”, Schriesheim & Ladenburg.
- 2013–2018 **summer programme**, social tutor at German language summer school (“Internationaler Ferienkurs”) of Heidelberg University.
- since 2013 **DJ**, branded as “waverley”, resident DJ in halle02 in Heidelberg since 2016.
- since 2012 **self-employed**, “IT Tim Tugendhat”, IT solutions for small businesses and private individuals.
- 2010 **retail**, ARLT Computer Heidelberg GmbH.
- 2008 **reserve exercise**, Elektronisches Kampfführungsbataillon 922.
- 2006–2007 **military service**, Unterstützungsbataillon Kommando Operative Führung Eingreifkräfte (today: Unterstützungsverband Multinationales Kommando Operative Führung).

prizes, grants

- 2014–2018 graduate student grant of Astronomisches Rechen-Institut Heidelberg
- 2014–2018 International Max Planck Research School Heidelberg fellow & member of Heidelberg Graduate School of Fundamental Physics (HGSFP)
- 2011–2012 Erasmus grant
- 2006 A-level prize for pupils of the German Physical Society

languages

English native (C2)

German native (C2)
French intermediate (B1)
Esperanto intermediate (B2)

IT skills

operating systems GNU/Linux, macOS, Windows
scientific software Mathematica, R, \LaTeX
programming languages Python, C, Fortran
database management SQL
multimedia Adobe Photoshop, Adobe Premiere, Audacity

memberships, activism

Member Social Democratic Party of Germany (SPD), German Physical Society, Wikimedia Deutschland e.V., Fallschirmsportclub Mannheim e.V., radioaktiv Campusradio Rhein-Neckar e.V., Freifunk Rhein-Neckar e.V., Volksbund Deutsche Kriegsgräberfürsorge e.V.

hobbies & interests

literature philosophy, history, politics, psychology
sports cycling, football, skydiving, esports, chess