

# TIM DIETRICH – CURRICULUM VITAE

## PERSONAL DETAILS

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## EDUCATION

2016 PhD (“summa cum laude”–excellent 1.0)  
Faculty of Physics and Astronomy, Friedrich-Schiller-University Jena, Germany  
2012 Master of Science in Physics (1.0)  
Faculty of Physics and Astronomy, Friedrich-Schiller-University Jena, Germany  
2010 Bachelor of Science in Physics (1.0)  
Institute of Physics, Martin-Luther-University Halle-Wittenberg, Germany  
2007 High school diploma (1.0) – Gymnasium Philanthropinum Dessau

## PROFESSIONAL EXPERIENCE

2025 Visiting professor at University of the Balearic Islands (March/April)  
since 2025 W3-Professor for Theoretical Astrophysics at the University of Potsdam  
2024-2025 W2-Professor for Theoretical Astrophysics at the University of Potsdam  
since 2021 Max Planck Fellow – Independent Research Group leader at AEI  
2020-2024 W1-Professor for Theoretical Astrophysics at the University of Potsdam  
2018-2020 Marie Skłodowska-Curie Fellow at Nikhef, Amsterdam  
2015-2018 Postdoc at the Max Planck Institute for Gravitational Physics Potsdam (AEI)  
2015 Research assistant at the Friedrich-Schiller-University Jena  
2011-2014 Research assistant for the CRC/TR-7 “Gravitational Wave Astronomy”  
2008-2010 Research assistant at the Martin-Luther-University Halle-Wittenberg

## FELLOWSHIPS AND AWARDS

### Scholarships:

2013-2015 Scholarship of the Landesgraduiertenstipendium Thuringia  
2010 Gustav-Mie Scholarship of the Martin-Luther-University [declined]  
2009-2012 Scholarship of the German National Academic Foundation

### Grants:

2026 Leibniz ScienceCampus SCALES (total 4.12 Mio. Euro; Speaker)  
2026 Extension Max Planck Fellow Group (0.2 Mio. Euro)  
2024 Individual Grant of the German Research Foundation (0.23 Mio. Euro)  
2023 Scholarship from the Daimler & Benz Foundation (0.04 Mio. Euro)  
2022 Major Instrumentation; German Research Foundation (1.05 Mio. Euro)  
2022 Starting Grant of the European Research Council (1.5 Mio. Euro)  
2022 Individual Grant of the German Research Foundation (0.22 Mio. Euro)  
2021 Max Planck Fellow (0.56 Mio. Euro)  
2017 Individual Marie-Curie Fellowship (0.17 Mio. Euro)

### Awards/Prizes:

2023 IUPAP Early Career Scientist Prize in General Relativity and Gravitation  
2021 Heinz Maier-Leibnitz Prize from the German Research Foundation  
2019 Heinz Billing Prize for the Advancement of Computational Science  
2017 PhD thesis prize of the German Physical Society of the sections  
“Gravitation and Relativity”, “Hadrons and Nucleons”, and “Particle physics”  
2017 PhD thesis prize of the Friedrich Schiller University Jena  
2010 Gustav-Mie-Bachelor-Prize

### others:

2024 offer for W3-Professorship at Eberhard Karls University Tübingen (declined)  
2019 offer for W1-Professorship at Goethe University Frankfurt (declined)

### Host for Fellowships/ Co-PI (selected)

2025	Host for the Humboldt Fellowship of Dr. Takasy
2025	Host for CONFAP-ERC IA 2024 (FAPESP) project of Prof. Ujevic
2021	Host for the Humboldt Fellowship of Dr. Samajdar
2021	Co-PI for CERN PhD Grants (Scholar E. Giangrandi, PI C. Providência)
2021	Co-I for FCT Grant DMINBNS - EXPL/FIS-AST/0735/2021 (PI V. Sagun)
2021	Host for the CAPES/PRINT Grant for Prof. Ujevic
2020	Co-advisor for the FAPESP Fellowship of Henrique Leonhard Gieg

### PI/Co-PI of computer time allocations (selected)

2021-2026	Lise & Emmy of HLRN – project bp00049 (108.2 Mio. CPUhs)
2021-2024	SuperMUC_NG at LRZ – project pn29ba (59.10 Mio. CPUhs)
2020-2025	HAWK at HLRS – 44189 (313.27 Mio CPUhs)
2018-2021	Gauss project at SuperMUC – project pn56zo (132.5 Mio CPUhs)
2015-2018	Gauss project at SuperMUC – project pr48pu (139.2 Mio CPUhs)

## SUMMARY OF SCIENTIFIC OUTPUT

### Track record

<b>Short authorlist articles</b>	<b>165</b>
Peer-reviewed articles:	143
Non-peer-reviewed articles:	11
Preprints/journal submissions:	11
<b>Collaboration articles</b>	<b>138</b>
LIGO/Virgo/Kagra publications:	121
ET Consortium:	1
GRANDMA collaboration publication:	9
White Paper:	7
<b>Additional measures:</b>	
Number of first author articles:	23
h-index (HEP-SPIRES) all/short-author:	98 / 57
Number of invited conference talks:	40
Number of invited seminars/colloquia:	53
Number of contributed talks:	19
Total external acquired funding (in Mio. Euro):	~ 4.0
Total acquired computational resources as PI/Co-PI (in Mio. CPUhs):	~830

### Selected top publications

- Peter T.H. Pang, Tim Dietrich (corresponding author), Michael W. Coughlin, Mattia Bulla, et al., *NMMA: A nuclear-physics and multi-messenger astrophysics framework to analyze binary neutron star mergers*, **Nature Commun.** **14** (2023) **1**, 8352.
- S. Huth, P. T. H. Pang, I. Tews, T. Dietrich, et al., Constraining Neutron-Star Matter with Microscopic and Macroscopic Collisions, **Nature** **606** (2022) 276-280;
- G. Ashton and T. Dietrich, The use of hypermodels to understand binary neutron star collisions, **Nat. Astron.** **6** (2022) **8**, 961-967.
- T. Dietrich, M. W. Coughlin, P. T. H. Pang, M. Bulla, et al., Multi-messenger constraints on the neutron-star equation of state and the Hubble constant, **Science** **370**, 1450 (2020);
- LIGO Scientific and Virgo Collaborations (*member of the paper writing team*), Properties of the binary neutron star merger GW170817, **Phys.Rev.** **X9** (2019) **no.1**, 011001.
- LIGO Scientific and Virgo Collaborations, GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral, **Phys.Rev.Lett.** **119** (2017) 161101;
- T. Dietrich, S. Bernuzzi, W. Tichy, Closed-form tidal approximants for binary neutron star gravitational waveforms constructed from high-resolution numerical relativity simulations, **Phys. Rev. D** **96**, 121501 **Rap. Com.** (2017);

## Supervision

*currently*

*primary supervisor:*

6 postdocs (Henrique Leonhard Gieg, Anna Puecher, Guilherme Grams, Natalie Williams, Narenraju Nagarajan, János Takátsy [begin October 2025, Humboldt Fellow]),

8 PhD students (Adrian Abac, Hauke Köhn, Ivan Markin, Anna Neuweiler, Henrik Rose, Rohan Srikanth, Ramon Jaeger, Dio Danarianto)

4 Master students (Samriddho Ghosh, Ritwik Sharma, Noah MacKay, Joshua Kupka)

*in addition, I am acting as a secondary supervisor and mentor for more than a dozen students.*

*previously*

*primary supervisor:* 2 post-doctoral researchers (Anuradha Samajdar [Humboldt Fellow]; Vsevolod Nedora), 4 PhD students (Federico Schianchi, Nina Kunert, Ludovica Crosato [direct supervision by Masaru Shibata], Tsz Lok Lam [direct supervision by Masaru Shibata]), 14 Master students (Ashwin Shirke, Matthew Beaudoin, Karol Pawel Peters, Oliver Steppohn, Ramon Jaeger, Ranjith Mudimadugula, Sahil Jhawar, Ivan Markin, Salehi Pouyan, Henrik Rose, Parikshit Biswas, Anna Neuweiler, Michele Mattei, Mattia Emma, Nina Kunert), and 2 Bachelor students (Lilly Zeberer, Sophia Estella Ve Dahm)

## Teaching activities

*University of Potsdam (since 2020)*

- *Lectures:* ‘Multi-Messenger Astronomy’, ‘Multi-messenger Astronomy: Neutron Stars and their Mergers’, ‘Multi-Messenger Astronomy: Overview and Basics’, ‘Numerical Relativity’, ‘Numerical Relativity: Simulating Black Holes’, ‘Numerical Relativity: Hydrodynamics’, ‘Statistical Power: Understanding the Universe with Bayesian Analysis’, ‘Computational Astrophysics’ as part of the International Max Planck Research School on Gravitational Waves
- *Seminars and others:* ‘Staying up to date: Recent Developments in Astrophysics’, ‘Research Seminar Theoretical Astrophysics’, ‘Seminar zur Theoretischen Physik’, ‘Introductory Project Astrophysics’, ‘Research Training Astrophysics’

*One-day lectures*

- Gravitational Waves & Numerical Relativity (Amsterdam); Parallel Programming: Numerical Relativity: Numerical Methods and Implementation (Potsdam); Teacher Training Gravitational Waves: Simulations of colliding black holes (Munich)

*Seminars/Tutorials*

- *University of Jena:* Seminar ‘Theoretical Electrodynamics’; Seminar ‘Mathematical Methods II’
- *University of Halle:* ‘Tutorial Mathematical Physics’; ‘Tutorial Mathematical Basics for Quantum Physics’; ‘Tutorial Theoretical Mechanics’; ‘Online Tutorial for Theoretical Physics’; ‘Tutorial Introduction to Theoretical Mechanics’

## Institutional Responsibilities

- since 2024 Deputy representative of the Physics and Astronomy Department in the doctoral committee at the Faculty of Science at the University of Potsdam
- since 2022 Deputy Ombudsperson of the Max Planck Institute for Gravitational Physics
- 2012-2015 cluster administrator of the *quadler* cluster of the University of Jena (880 cores)
- 2011-2013 organizer/coordinator of the videoseminar “CRC/TR7 – Gravitational Wave Astronomy”

## Reviewing Activities

Reviewer for Journals:	Physical Review Letters/D/C, Astrophysical Journal Letters, Astrophysical Journal, Astronomy & Astrophysics, Annalen der Physik, Monthly Notices of the Royal Astronomical Society (Letters), Particles, Galaxies, Symmetry, General Relativity and Gravitation, European Physics Journal, Nature Communications
Reviewer for HPC center:	Leibniz Supercomputing Centre, Italian SuperComputing Resource Allocation
Reviewer for Funding Agencies:	National Science Foundation, The Velux Foundations (Denmark), ERC Advanced Grants, German Research Foundation, Swiss National Science Foundation, Israel Science Foundation, Science and Technology Facilities Council [UK], Natural Sciences and Engineering Research Council of Canada, German Academic Exchange Service (DAAD), Research Council of KU Leuven, Humboldt Foundation, Independent Research Fund Denmark, Carl-Zeiss Foundation

## Leadership Roles in Scientific Societies and Major Collaborations

2021-2023	elected for German Physical Society Advisory Board for ‘Gravitation and Relativity’
since 2021	chair of the division ‘nuclear physics’ for the Einstein Telescope Consortium
2020-2025	co-chair of the ‘extreme matter’ group of the LIGO-Virgo-Kagra Collaboration

## Membership of Scientific Societies and Major Collaborations

since May 2020	Senior Member of the LIGO Scientific Collaboration
since July 2019	Member of the GRANDMA collaboration
since May 2018	Member of the Collaboration for Computational Relativity (CoRe)
Jan. 2018-May 2020	Member of the Virgo Collaboration
since October. 2017	Member of the GWIC [Gravitational Wave International Committee]-3G
Dec. 2015-Jan. 2018	Member of the LIGO Scientific Collaboration
Oct. 2015- Jan. 2018	Member of the Simulating Extreme Spacetime (SXS) Collaboration
since 2007	Member of German Physical Society

## Invited plenary talks/colloquia [selected]

- 15.9.2023 - Meeting of the Astronomical Society Germany (plenary talk): *Interpreting the multi-messenger picture drawn by neutron star mergers*
- 26.7.2022 - Frontiers in Numerical Relativity 2022: *Neutron star merger simulations to enable multi-messenger astronomy studies*
- 17.06.2021- (Keynote talk of the 9th Belgium - Dutch Relativity Meeting- online): *Nuclear physics and multi-messenger astrophysics studies of neutron stars*
- 24.10.2019 - (Symposium of the Chemical-Physical-Technical division of the Max Planck Society, Berlin - Germany) Heinz-Billing Award talk: *Numerical Relativity Simulations of Binary Neutron Star Mergers: Applications in the Multi-Messenger Astronomy Era*
- 20.08.2019 - (University of Oxford- United Kingdom) Astrophysics Seminar: *The multi-messenger picture of merging neutron stars*
- 20.03.2019 - (Munich - Germany) DPG-Spring Meeting: Symposium Extreme matter meets extreme gravity – review talk: *Modelling and analyzing a binary neutron-star merger: Interpreting a multi-messenger picture*

## Important Outreach Activities

- Visualizations of the neutron star mergers GW170817 and GW190425 used by more than 50 newspapers, the German Federal Ministry for Research, and German television shows and watched about 100,000 times on youtube

- Binary black hole visualizations for GW151226, GW170104, GW170814 used by *The New York Times*, *The Guardian*, *Frankfurter Allgemeine Zeitung* and a few hundred other newspapers, watched about 100,000 times on youtube
- Binary neutron star visualizations used in the *Warped Spacetime* performance of K. Thorne and the academy award winners P. Franklin and H. Zimmer
- Interviews and animations for the Advanced LIGO Documentary Project and the Japanese NHK documentary about GW170817
- Outreach material for the black hole - neutron star detection; (several online articles, e.g. New York Times, NASA) and more than 100,000 youtube views, as well as a radio interview on MDR
- Press Release focussing on our article *Science* 370, 1450 (2020) (~ 50 journals; e.g. *Scientific American*/ *Welt der Physik*)
- Press Release focussing on my scientific achievements, in particular, the Heinz-Maier-Leibnitz Prize; which led to the assignment as Potsdam's person of the day on 17th March 2021
- Podcast episode for the University of Potsdam about my work in the field of multi-messenger astrophysics
- 7 highlighted papers by PRD Kaleidoscope and Cover image for *Phys.Rev.Lett.* 119, issue 16 [i.e., the PRL volume for the GW170817 detection paper]
- numerous articles including including *Spiegel*, *Heise* etc. about our work of the Alcubierre Metric

## FULL PRESENTATION/TALK LIST

### INVITED CONFERENCE TALKS

- 05.02.2026 - Multi-Messenger Astrophysics in the Dynamic Universe, invited talk, Kyoto, "Decoding Neutron Star Mergers: From Numerical Relativity to Multi-Messenger Inference"
- 05.12.2025 - Einstein Toolkit Workshop, invited talk, online, *Gravitational-Waveform Modeling for BNS and BHNS Systems*
- 23.07.2025 - Frontiers in Numerical Relativity, Palma de Mallorca, invited panelist
- 16.07.2025 - GR24 & Amaldi 16, Glasgow, plenary prize talk, *Decoding Neutron Star Mergers: From Numerical Relativity to Multi-Messenger Inference*
- 28.04.2025 - Introducing ULTRASAT to the German Community – Workshop (Berlin, Germany) *Modelling and Bayesian Analysis of Binary Neutron Star Mergers*
- 19.09.2024 - Nuclear Physics in Astrophysics – Conference (Dresden, Germany) *Combining nuclear physics and multi-messenger observations*
- 09.09.2024 - Nuclear Physics in Astrophysics – School (Stolpen, Germany) *Multi-messenger constraints on NS EoS and Hubble constant*
- 05.09.2024 - Workshop Astronomy from Multiple Perspectives – Compact Objects (Jena, Germany) *Probe and Prejudice: Joint nuclear-physics and multi-messenger constraints on the neutron star equation of state*
- 09.07.2024 - INT WORKSHOP "Inverse Problems and Uncertainty Quantification in Nuclear Physics" (Seattle, US) *Probe and Prejudice: Joint nuclear-physics and multi-messenger constraints on the neutron star equation of state*
- 05.12.2023 - 1st Astrophysics in the New Era of MM Astronomy International Conference (Pocos de Caldas, Brazil–online) *Joint nuclear-physics and multi-messenger astrophysics interpretation of compact binary mergers*
- 21.9.2023 - (Darmstadt- Germany) NuSym23, XIth International Symposium on Nuclear Symmetry Energy: *Combining nuclear physics and multi-messenger observations*
- 15.9.2023 - (Berlin- Germany) Meeting of the Astronomical Society Germany (plenary talk): *Interpreting the multi-messenger picture drawn by neutron star mergers*
- 24.05.2023 - (Utrecht- Netherlands) GRASP Opening Workshop: *Joint nuclear-physics and multi-messenger astrophysics interpretation of compact binary mergers*
- 08.05.2023 - (Berlin- Germany) Ready, set, go! Preparing for the O4 LIGO-Virgo-KAGRA observing run: *Simulating Binary Neutron Star Mergers: Implications for Multi-messenger Astronomy and Dark Matter Searches*
- 04.05.2023 - (Lisbon- Portugal) Dark Matter and Stars: Multi-Messenger Probes of Dark Matter and Modified Gravity: *Joint nuclear-physics and multi-messenger astrophysics interpretation of compact binary mergers*
- 24.04.2023 - (American Physics Society – invited talk in session Neutron-star equation of state in the 2030s, *Equation-of-state measurements based on joint multimessenger data*
- 01.12.2022 - (Bad Honnef- Germany) 774. WE-Heraeus-Seminar; Kilonova: Multimessenger and Multiphysics: *Multi-messenger astrophysics studies of merging neutron star*
- 16.11.2022 - (Cascina- Italy) 1st ET Annual meeting: *Nuclear physics with ET: a comparison between configurations*
- 26.7.2022 - (Jena- Germany) Frontiers in Numerical Relativity 2022: *Neutron star merger simulations to enable multi-messenger astronomy studies*
- 22.6.2022 - (Trento- Italy) ECT\* hybrid workshop: Neutron stars as multi-messenger laboratories for dense matter: *Interpreting the multi-messenger picture drawn by merging neutron stars (online)*
- 05.5.2022 - (Heidelberg- Germany) Computational Astrophysics Symposium: *Interpreting the nuclear physics - multimessenger astrophysics picture drawn by neutron star mergers*

- 25.4.2022 - (Bad Honnef- Germany) 765. WE-Heraeus-Seminar; Gravitational Wave and Multimessenger Astronomy: *Interpreting the nuclear physics - multimessenger astrophysics picture drawn by neutron star mergers*
- 18.11.2021 - (Santiago de Compostela- Spain) Course on Neutron Star Physics – Instituto Galego de Altas Enerxias: *Multi-Messenger Studies of Binary Neutron Star Systems* (online);
- 11.11.2021 - (Berlin- Germany) Helmholtz Weizmann Research School for Multimessenger Astronomy: *Interpreting the nuclear physics – multi-messenger astrophysics picture drawn by neutron star mergers*
- 17.06.2021 - Neutron Stars as multi-messenger laboratories for dense matter; Invited panelist; *Gravitational Waves and Numerical Relativity Simulations*
- 17.06.2021- Keynote talk of the 9th Belgium - Dutch Relativity Meeting (online): *Nuclear physics and multi-messenger astrophysics studies of neutron stars*
- 26.02.2020 - (Tbilis, Georgia) GRANDMA workshop (online presentation): *Constraining binary properties from kilonova observations*
- 12.11.2019 - (Amsterdam, EuCAPT workshop: Gravitational Waves for Fundamental Physics) Invited panelist for Numerical Relativity: *Challenges in Numerical relativity: GRHD, GRMHD, and ECOs*
- 24.10.2019 - (Berlin- Germany), Symposium of the Chemical-Physical-Technical division of the Max Planck Society, Heinz-Billing Award talk: *Numerical Relativity Simulations of Binary Neutron Star Mergers: Applications in the Multi-Messenger Astronomy Era*
- 26.06.2019 - (University Park campus of Penn State- US) IGC25: Multimessenger Universe: Invited panelist for Theory and Simulations of Binary Neutron Stars: *The status of General Relativistic Hydrodynamics Simulations*
- 20.03.2019 - (Munich- Germany) DPG-Spring Meeting: Symposium Extreme matter meets extreme gravity: *Modelling and analyzing a binary neutron-star merger: Interpreting a multi-messenger picture*
- 29.08.2018 - (Berlin- Germany) 2018 TeV Particle Astrophysics conference: *A Multimessenger Picture of Binary Neutron Star Mergers*
- 09.05.2018 - (Palma de Mallorca- Spain) 8th Iberian Gravitational Waves Meeting: *Modeling the GW signal of Binary Neutron Star Systems*
- 19.02.2018 - (Bremen - Germany) Workshop of the Research Training Group “Models of Gravity: The Multimessenger Picture of Binary Neutron Star Mergers
- 12.12.2017 - (Bonn - Germany) 11th Bonn workshop on Formation and Evolution of Neutron Stars: *The Multimessenger Picture of Binary Neutron Star Mergers*
- 17.07.2017 - (Lansing - US) MICRA 2017 [Microphysics in Computational Relativistic Astrophysics]: *Gravitational Waves and Electromagnetic Signals of Generic Binary Neutron Star Mergers*
- 27.06.2017 - (Lugano - Switzerland) PASC 2017: *Simulating Generic Binary Neutron Star Mergers*
- 27.03.2017 - (Münster - Germany) DPG-Spring Meeting (PhD thesis finalists’ talk): *Simulating Binary Neutron Star Mergers*
- 23.09.2016 - (Erlangen - Germany) HAP Workshop, The Non-Thermal Universe: *Gravitational waves and the prospects for multi-messenger astronomy*

#### INVITED SEMINARS/COLLOQUIA

- 09.05.2025 - (Berlin Zeuthen - Germany) Astroparticle Seminar of DESY: *Simulating and Interpreting the Multimessenger Picture of Neutron Star Mergers*
- 28.03.2025 - (Universitat de les Illes Balears (Spain) Seminar: *Modelling and Interpreting the Multimessenger Picture of Neutron Star Mergers*
- 18.02.2025 - (online – Network for Neutrinos, Nuclear Astrophysics, and Symmetries): *Simulating and Interpreting the Multimessenger Picture of Neutron Star Mergers*

- 13.02.2025 - (University of Southampton, UK – Gravity Seminars): *Simulating and Interpreting the Multimessenger Picture of Neutron Star Mergers*
- 31.01.2025 - (Royal Observatory in Brussels, Joint Theoretical Gravitational Wave Seminar): *Simulating and Interpreting the Multimessenger Picture of Neutron Star Mergers*
- 06.11.2024 - Plenary talk for the Verein Nordenhamer Sternenfreunde e.V.- Nordenham, *Multimessenger Astronomie: Kosmischen Geheimnissen auf der Spur* (public talk)
- 05.11.2024 - Plenary talk for Olbers-Gesellschaft - Bremen, *Multimessenger Astronomie: Kosmischen Geheimnissen auf der Spur* (public talk)
- 30.08.2024 - Higgs Colloquium - University of Edinburgh (Edinburgh, UK) *Interpreting the multimessenger picture of colliding neutron stars*
- 24.07.2024 - Seminar of the Astrophysical and Cosmological Relativity Division AEI Potsdam (Potsdam, Germany) *Using numerical-relativity simulations and multi-messenger astrophysics to constrain the neutron star equation of state*
- 11.06.2024 - Physics Seminar at the University of Stavanger (Stavanger, Norway) *Interpreting the multimessenger picture drawn by compact binary mergers*
- 06.05.2024 - Physics Colloquium at the University of Regensburg (Regensburg, Germany) *Interpreting the multimessenger picture drawn by compact binary mergers*
- 6.11.2023 - Gravity Seminar at University of Virginia (online): *Interpreting the multimessenger picture drawn by compact binary mergers*
- 11.9.2023 - Seminar at Niels Bohr Academy (Copenhagen): *Interpreting the multi-messenger picture drawn by neutron star mergers*
- 17.05.2023 - Public Talk at the Planetarium am Insulaner in Berlin, *Multimessenger Astrophysik* (in German)
- 14.04.2023 - Online-seminar-in-mathematical-numerical-relativity *Simulating Binary Neutron Star Mergers: Implications for Multi-messenger Astronomy and Dark Matter Searches*
- 08.03.2023 - (Astronomical Observatory of Trieste – Institute Seminar) *Nuclear physics and multi-messenger astrophysics studies of neutron stars*
- 15.12.2022 - (Università di Milano Bicocca – Colloquium ) *Nuclear physics and multi-messenger astrophysics studies of neutron stars*
- 24.11.2022 - (Utrecht University – Colloquium of the Gravitational and Subatomic Physics) *Nuclear physics and multi-messenger astrophysics studies of neutron stars*
- 11.11.2022 - (Heidelberg University – Physics Colloquium) *Revealing Cosmic Mysteries with the Help of Compact Binary Mergers*
- 07.06.2022 - (University of Leipzig – Physics Colloquium) *Revealing Cosmic Mysteries with the Help of Compact Binary Mergers*
- 19.05.2022 - (University of Southampton, UK – Gravity Seminars – online): *Interpreting the nuclear physics - multi-messenger astrophysics picture drawn by neutron star mergers*
- 08.03.2022 - (University of Austin, Texas – Theory Group Seminar - online): *Constraining supranuclear-dense matter with nuclear physics and multi-messenger astrophysics*
- 17.12.2021- (SFB 1294 online Colloquium – University of Potsdam - online): *Analyzing Multi-Messenger Astronomy Data to reveal fundamental Properties of the Cosmos*
- 01.07.2021 - IVK Webinar- Gravitational waves from neutron star-black hole coalescences, *A nuclear physics — multi-messenger astronomy analysis of binary neutron star mergers*
- 23.06.2021 - (La Sapienza - Rome (Italy) Gravity Seminar [online]: *A nuclear physics — multi-messenger astronomy analysis of binary neutron star mergers*
- 27.05.2021 - (Perimeter Institute (Canada) Strong Gravity Seminar [online]: *A nuclear physics — multi-messenger astronomy analysis of binary neutron star mergers*

- 30.04.2021 - (Universitat de les Illes Balears (Spain) Seminar [online]: *A nuclear physics — multi-messenger astronomy analysis of binary neutron star mergers*
- 20.04.2021 - (Los Alamos National Laboratory - US) Nuclear Physics Seminar [online]: *A multi-messenger interpretation of merging neutron stars*
- 14.12.2020 - (Potsdam - Germany) Astroparticle Physics Seminar [online]: *A multi-messenger interpretation of merging neutron stars*
- 28.09.2020 - (US, University of Minnesota) Cosmology Seminar [online]: *A multi-messenger interpretation of merging neutron stars*
- 18.03.2020 - (Potsdam - Germany) Seminar at Max Planck Institute for Gravitational Physics [online]: *A multi-messenger interpretation of merging neutron stars*
- 05.11.2019 - (Heidelberg - Germany) Colliding Pizza Seminar: *Modeling, Detecting, Analyzing, and Interpreting Gravitational Waves*
- 04.10.2019 - (Stockholm - Sweden) Astrophysics Seminar: *The multi-messenger picture of merging neutron stars*
- 20.08.2019 - (Oxford - United Kingdom) Astrophysics Seminar: *The multi-messenger picture of merging neutron stars*
- 24.05.2019 - (Berlin Zeuthen - Germany) Astroparticle Seminar of DESY: *Merging Neutron Stars: Interpreting the multi-messenger picture*
- 25.03.2019 - (Jena - Germany) Seminar of the Institute: *Constraining supranuclear baryonic and ultra-light axionic matter in the multi-messenger astronomy era*
- 06.02.2019 - (Urbana/Champaign- US) Astrophysics, Gravitation and Cosmology Seminar: *Binary neutron stars and their mimickers: Interpreting the multi-messenger picture*
- 30.01.2019 - (Frankfurt- Germany) Mini-Symposium on the connections of Gravitational Wave Physics and QCD: *Binary neutron stars and their mimickers: Interpreting the multi-messenger picture*
- 18.01.2019 - (Potsdam- Germany) Seminar at University of Potsdam: *Binary neutron stars and their mimickers: Interpreting the multi-messenger picture*
- 22.11.2018 - (Hanover - Germany) Seminar at Albert Einstein Institute: *When neutron star (mimicker) merge: a multi-messenger picture*
- 01.10.2018 - (Amsterdam - Netherlands) Cosmology Seminar: *When neutron star (mimicker) merge: a multi-messenger picture*
- 15.05.2018 - (Frankfurt - Germany) Astro Coffee Seminar: *Gravitational Waves and Electromagnetic Counterparts for Generic Binary Neutron Star Systems*
- 05.04.2018 - (Göttingen - Germany) Colloquium of Astrophysical Department: *A Multimessenger Picture of GW170817*
- 16.03.2018 - (Cambridge - United Kingdom) Relativity Seminar: *Simulating Binary Neutron Stars*
- 23.02.2018 - (Amsterdam - Netherlands) Seminar of Gravitational Wave Data-analysis Group: *Gravitational Waves and Electromagnetic Counterparts for Generic Binary Neutron Star Systems*
- 25.04.2017 - (Jena - Germany) Seminar for Research Training Group "Quantum and Gravitational Fields": *Simulating Neutron Star Mergers*
- 08.03.2017 - (Potsdam - Germany) Seminar at Albert Einstein Institute: *Simulating Generic Binary Neutron Star Mergers*
- 09.02.2017 - (Trento - Italy) INFN Seminar: *Simulating generic binary neutron star mergers*
- 31.01.2017 - (Parma - Italy) INFN Seminar : *Simulating generic binary neutron star mergers*
- 25.11.2016 - (Berlin - Germany) Public Talk at Bruno H.-Bürgel Observatory Berlin: *Gravitational Wave Astronomy (in German)*
- 21.06.2016 - (Magdeburg - Germany) Colloquium of Physics Department: *Gravitational Waves*

- 19.01.2015 - (Potsdam - Germany) Seminar at Albert Einstein Institute: *Recent progress in numerical relativity simulations of neutron star spacetimes*
- 28.10.2014 - (Frankfurt - Germany) Astro Coffee Seminar: *Realistic spins and quasiuniversal relations in binary neutron star mergers*
- 20.01.2014 - (Jena - Germany) SFB/TR7-Videoseminar: *Can spin be ignored in binary neutron star mergers?*

#### CONTRIBUTED TALKS

- 16.07.2025 - GR24 & Amaldi 16, Glasgow, *Simulating and Interpreting the Multimessenger Picture of Neutron Star Mergers*
- 28.02.2024 - FEET Meeting 2024 (Bormio, Italy) *Combined nuclear-physics and multi-messenger astrophysics*
- 24.03.2022 - DPG-Spring Meeting [online]: *Constraining supranuclear-dense matter with nuclear physics and multi-messenger astrophysics*
- 22.07.2021 - Amaldi [online]: *A nuclear physics — multi-messenger astronomy analysis of binary neutron star mergers*
- 10.07.2019 - (Valencia - Spain) GR22/Amaldi: *A Multi-Messenger Analysis of Neutron Star Mergers with Numerical Relativity Simulations*
- 29.05.2018 - (Groningen - Netherlands) 7th Belgian-Dutch Gravitational Waves Meeting: *A multi-messenger picture of binary neutron star mergers*
- 22.03.2018 - (Cambridge - UK) 26th Euromicro International Conference on Parallel, Distributed and Network-based Processing: *High-resolution numerical relativity simulations of spinning binary neutron star mergers*
- 14.03.2017 - (Bremen - Germany) DPG-Spring Meeting: *Simulating Generic Binary Neutron Star Mergers*
- 14.12.2016 - (Valencia - Spain) CoCoNut meeting: *Simulating Generic Binary Neutron Star Mergers*
- 11.07.2016 - (New York - US) GR21: *Generic Binary Neutron Star Systems*
- 03.03.2016 - (Hamburg - Germany) DPG-Spring Meeting: *Binary Neutron Stars with Generic Spin and Mass ratio*
- 19.03.2015 - (Berlin - Germany) DPG-Spring Meeting: *Dynamical simulations of neutron star spacetimes with conservative mesh refinement*
- 05.12.2014 - (Jena - Germany) Conclusion Workshop of SFB/TR7: *Gravitational Wave Astronomy: Quasiuniversal properties of binary neutron star mergers*
- 20.03.2014 - (Berlin - Germany) DPG-Spring Meeting: *Mergers of binary neutron stars with realistic spin*
- 27.02.2014 - (Tübingen - Germany) SFB/TR7 semiannual meeting: *Mergers of binary neutron stars with realistic spin*
- 04.09.2013 - (Prague - Czech Republic) International Conference on Mathematical Modeling in Physical Sciences: *Spinning black hole in the puncture method*
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- 27.02.2013 - (Jena - Germany) DPG-Spring Meeting: *1+log-Trumpet Initial Data in Numerical Relativity*
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