

# Dr. Daniela Doneva Doneva

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## Personal

Born on October 08, 1984

Bulgarian citizen

Children – 2

## Education

Ph.D. in Theoretical Physics, Faculty of Physics, St. Kliment Ohridski University of Sofia, 2012

M.Sc. in Astronomy and Astrophysics, Faculty of Physics, St. Kliment Ohridski University of Sofia, 2008

B.Sc. in Physics, Faculty of Physics, St. Kliment Ohridski University of Sofia, 2007

## Research Employments

Emmy Noether Independent Junior Research Group Leader, since 2019

Margarete von Wrangell Habilitation Fellowship, 2015 – 2018

Alexander von Humboldt Fellow, University of Tübingen, 2013 – 2015

Postdoc, University of Tübingen, 2012 – 2013

DAAD Research Fellow, University of Tübingen, 2009, 2010, 2011

## Employments Outside Academia

Software engineer, Exact Tech LLC and InterConsult America LLC, Part time employment 2007-2011

## Career Breaks

Maternity leave, 2018 – 2019

Maternity leave, 2015 – 2016

## Research grants

More than 90% of my scientific employments were funded through my own successful fellowship applications. I was awarded also with the following grants financing the creation of my own independent research group or networking funds:

Emmy Noether program awarded, since 2019 (1.300.000 EUR)

Cooperation project on the topic „Compact object binaries in modified theories of gravity – theoretical modeling and gravitational wave emission“, Baden-Württemberg Foundation, since 2020-2023 (10.000 EUR)

Elite Programme for Postdocs, Baden-Wuerttemberg Foundation, Project Leader, 2016 – 2020 (115.000 EUR)

Networking funds Tübingen-Nottingham, co-Principle Investigator, 2023 – 2024 (9.600)

I was also a participant in a number of additional projects funded by the Humboldt foundation, DAAD and the Bulgarian Funding Agency.

Together with the fellowship from the Humboldt foundation (90.000 EUR) and the Margarete von Wrangell Habilitation fellowship (300.000 EUR), I have attracted funding of over 1.8 million EUR.

## Referee

**Referee of the following scientific journals:** Physical Review Letters, Physical Review D, Classical and Quantum Gravity, Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, Journal of Cosmology and Astroparticle Physics, Physics of the Dark Universe, International Journal of Modern Physics D, Universe, General Relativity and Gravitation, European Physical Journal C & A, Europhysics Letter, Modern Physics Letters A

**Referee** for several national funding agencies.

**Main examiner** of 3 PhD students in France, Italy, Portugal, **Referee** for a number a master and bachelor thesis

## Research interests

Gravitational Waves, Numerical Relativity, Machine Learning, Theoretical Astrophysics, Cosmology, Computational Physics, Nuclear Matter Equation of State

## Awards and scholarships

Award for most significant scientific achievement, Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences, 2021

Pythagoras Grand Prize for Young Scientist, Ministry of Science and Education of Bulgaria, 2019

5-year Margarete von Wrangell Habilitation Fellowship, University of Tübingen, 2015

Award for most significant scientific achievement of a young scientist, Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences, 2014

Humboldt Research Fellowship for Postdoctoral Researchers, University of Tübingen, 2013

1 year DAAD research scholarship at the University of Tübingen, 2009

3 year PhD scholarship by the Bulgarian Ministry of Education, University of Sofia, 2009

Prize for high academic achievements in the name of Prof. Georgi Nadjakov, Foundation "Evrika", 2007

Prize for high academic achievements, Foundation for Support of Bulgarian Education, Sofia-Frankfurt/Main, 2006

## Invited talks and seminars

**Invited talk** – “Machine Learning in Science”, 11-12 July 2023, Tübingen, Germany

**Panelist** – “Connecting the dots: Toward inspiral-merger-ringdown gravitational waveforms beyond general relativity”, 14-16 June 2023, Max Planck Institute for Gravitational Physics, Germany

**Plenary talk** – “Foundations of Gravity”, 19-22 June 2023, Tartu, Estonia

**Invited talk** – Relativistic Days of Tours, 31 March - 02 June 2023, Tours, France

**Plenary talk** – “Dark Matter and Stars”, 3-5 May 2023, Lisbon, Portugal

**Invited talk** – Spring meeting of the German Physical Society, 20-25 March 2023, Dresden, Germany

**Invited seminar** – SISSA, Trieste, Italy, 2023

**Invited seminar** – Max-Planck-Institut für Radioastronomie, Bonn, Germany, 2023

**Invited seminar** – Central European Institute of Cosmology, Czech Academy of Sciences, Prague, 2023

**Plenary talk** – Madrid Winter Workshop, 12-15 December 2022, Madrid, Spain

**Invited seminar** – Queen Mary University of London, 2022

**Invited online seminar** – University of Aveiro, 2022

**Plenary talk** – 11th Aegean Summer School, 05-15 September 2022, Syros, Greece

**Invited seminar** – University of Valencia, 2022

**Invited seminar** – Center for astrophysics and gravitation, Lisbon, 2022

**Invited online seminar** – University of Heidelberg - ETH Zürich, 2022

**Plenary talk** – “Cosmological Frontiers in Fundamental Physics 2022”, 26-28 April 2022, Brussels, Belgium

**Invited Physics Colloquium** – University of Sofia, 2022

**Invited seminar** – AEI Potsdam 2022

**Invited online talk** – Div1 Meeting of the Einstein Telescope Observational Science Board, March, 2022

**Invited seminar** – Mathematical Physics Colloquium, University of Tübingen 2021

**Invited online talk** – LISA Consortium Telecon, November, 2021

**Invited online seminar** – La Sapienza University of Rome 2021

**Invited talk** – LISA Cosmology Working Group Workshop, 2021

**Invited keynote speaker** – NEB-19 Conference – Recent Developments in Gravity, Athens (Online), 20-23 September 2021

**Plenary talk** – “First summer school on Space research, technology and applications”, 5-11 July 2021, NAO Rozhen, Bulgaria.

**Invited online seminar** – Cosmology seminars at the Institute for Theoretical Physics Heidelberg 2021

**Invited online seminar** – Currents Trends in Gravitation seminar, University Oldenburg 2021

**Invited online seminar** – Astrocoffee, Institute for Theoretical Physics at Goethe University and the Frankfurt Institute for Advanced Studies 2021

**Invited online seminar** – School of Mathematical Sciences at the University of Southampton 2021

**Plenary talk** – “Gravitational Waves, Black Holes and Fundamental Physics”, 13-16 January 2020, Trieste, Italy

**Plenary talk** – “Neutron Star Theory - Madrid”, 10-11 October 2019, Madrid, Spain

**Invited talk** – 10th Aegean Summer School, 16-27 of September, Syros, Greece

**Invited seminar** – AEI Potsdam 2019

**Invited seminar** – La Sapienza University of Rome 2019

**Plenary talks** – “International Conference on Geometry, Integrability and Quantization”, 2-7 July 2017, Varna, Bulgaria

**Invited Keynote Speaker** – Conference “Models of Gravity – Black Holes, Neutron Stars and the structure of space-time”, 04-07 Oct. 2016, Oldenburg, Germany

**Plenary talk** – Annual NewCompStar Conference, 25-29 April 2016, Istanbul, Turkey

**Invited talk** – NESTAR Seminar, ZARM Bremen, 4th of August, 2014, Bremen, Germany

**Invited talk** – International School on Neutron Star Matter, March 4-7, 2014, Yukawa Institute for Theoretical Physics, Kyoto, Japan,

**Invited talk** – Models of Gravity Workshop, March 11-13, 2013, Oldenburg, Germany

## Conference Organization

Organizer of the Workshop “Neutron Stars in the GW Era”, 13 – 15 November 2019, Tübingen, Germany

Organizer of the 2017 NewCompStar school “Neutron stars: theory, observations and gravitational waves emission”, 11 – 15 September 2017, Sofia, Bulgaria

Organizer of the conference “Compact Stars and Black Holes”, 7 – 9 July 2015, Tübingen, Germany

## Membership

Awarded membership at the Elisabeth-Schiemann-Kolleg of the Max Planck Society, since 2021

Member of the LISA Consortium

Member of the Einstein Telescope Observational Science Board

Member of the Next Generation Event Horizon Telescope (ngEHT) Fundamental Physics Science Working Group

Member of the Editorial Board of the journal *Universe* (IF 2.278), since 2021

Core group member and member of the management committee of the COST Action “The multimessenger physics and astrophysics of neutron stars (PHAROS)”, 2017-2021

Member of the management committee of the COST Action “Cosmology and Astrophysics Network for Theoretical Advances and Training Actions (CANTATA)”, 2016-2020

Management committee substitute of the COST Action “Exploring fundamental physics with compact stars (NewCompStar)”, 2013-2016

Member of the Equal Opportunity Committee and a mentor for the Athene Mentoring program of the Physics Faculty, University of Tübingen, since 2020

Member of the Academic Council of St. Kliment Ohridski University of Sofia, June 2009 – October 2011

Member of the Faculty Council of Physics Faculty, University of Sofia, 2005 – 2011

Member of the Student Faculty Council of Physics Faculty, University of Sofia, 2005 – 2008

## Teaching

A supervisor of a number of postdocs, PhD and master students at University of Tübingen, Germany and University of Sofia

Lectures in Black Hole Physics, Relativistic Astrophysics; Exercises in Astronomy and Astrophysics, Observational Cosmology, Numerical Methods in Physics and Astrophysics, Introduction to General Relativity, at the University of Tübingen, Germany