Curriculum Vitae

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Nationality: Italian

Education

1994 – 1997	Ph.D. in Relativistic Astrophysics at SISSA, Trieste, Italy Supervisor: Prof. John C. Miller
1993 – 1994	Served as Officer (Midshipman) in the Technical Corp of the Italian Navy
1991 – 1992	Research work for the Laurea (MSc) Thesis at the Astronomical Observatory, Trieste, Italy
1992	Laurea (MSc) in Physics: 110/110 cum Laude
1989 – 1991	Undergraduate work at the Department of Physics, University of Trieste, Italy
1986 – 1988	Undergraduate work at the Department of Physics, University of Bari, Italy

Employment

2017 –	Director, Institute for Theoretical Physics, Frankfurt am Main
2016 – 2017	Deputy Director, Institute for Theoretical Physics, Frankfurt am Main
2015 –	Senior Fellow at the Frankfurt Institute for Advanced Studies
2013 –	Chair of Theoretical Astrophysics, Institute for Theoretical Physics, Frankfurt am Main
2006 – 2014	Head of the Numerical Relativity Group, Albert Einstein Institute
2004 – 2006	Director of the Computing Centre at SISSA, Trieste, Italy
2004 – 2006	Associate Professor in Relativistic Astrophysics at SISSA, Trieste, Italy
2004 – 2013	Adjunct Professor at the Department of Physics and Astronomy Louisiana State University, Baton Rouge, USA
2000 – 2003	Assistant Professor (Ricercatore) in Relativistic Astrophysics at SISSA, Trieste, Italy
2001 – 2002	Visiting Professor during the summer period at the *Albert Einstein Institute*, Golm, Germany
1999 – 2000	Five-year Senior Research Fellow, Astrophysics Sector at SISSA, Trieste, Italy
1998 – 1999	Postdoctoral Fellowship, Physics Dept., University of Illinois at Urbana (with Prof. F. K. Lamb)
1996 – 1998	Postdoctoral Fellowship, NCSA, University of Illinois at Urbana (with Prof. S. L. Shapiro)
1993 – 1994	Served as Officer (Midshipman) in the Italian Navy. Assigned to the submarine “Gazzana”

Professional Highlights

2017 –	Awarded Karl Schwarzschild Prize from the Walter Greiner Foundation
2017 –	Member of the Executive Board of the *Event Horizon Telescope Collaboration*
2017 –	Member of the Editorial Board of *Papers in Physics*
2017 –	Director, Institute for Theoretical Physics, Frankfurt am Main
2017 –	Member of the PRACE Access Committee
2017 –	Member of the German Astronomical Society
2016 –	Member of the Editorial Board of *Nature Physics*
2016	Appointed *Outstanding Referee* from the American Physical Society
2015 –	Member of the Interim Executive Board of the *Event Horizon Telescope Collaboration*
2015 –	Appointed *Senior Fellow* at the Frankfurt Institute for Advanced Studies (FIAS)
2014 –	Member of the Interim Board of the *Event Horizon Telescope Collaboration*
2014 –	Member of the Editorial board of *Computational Astrophysics and Cosmology*
2013	Max-Planck Award 2013
2013 – 2020	Awarded ERC Synergy Grant "BlackHoleCam"
2013 – 2017	Chair of "NewCompStar"(MPS1304), an ESF-funded COST Action
2012 – 2016	Member of the Review Panel for the Canadian NSERC
2012 –	Member of the Editorial board of *Living Reviews in Computational Astrophysics*
2012	Member of the AERES review panel for the Observatory of Paris, Meudon
2010 –	Member of the International Society of General Relativity and Gravitation
2014 –	Chief Editor of `hyperspace@gu`: the most popular blog about jobs and events in Gravity
2009 – 2014	Chief Editor of `hyperspace@aei`: the most popular blog about jobs and events in Gravity
2009	Member of SOC of *COSPAR 10, Event H02*, Bremen, Germany
2009	Member of LOC of the International Conference *NRDA 2009*, Potsdam, Germany
2009	Member of SOC 19th of *GRG19*, Mexico City, Mexico
2007 – 2013	Member of the Executive Board of the Virgo-EGO Scientific Council (VESF)
2007 – 2011	Co-Chair of `CompStar`, an ESF-funded research network on compact stars
2007 – 2011	Member of the Steering Committee of `CompStar`
2006 – 2012	Member of the Editorial Board of the Journal *Classical and Quantum Gravity*
2006	Chair of LOC of the Conference *New Frontiers in Numerical Relativity*, Potsdam, Germany
2006	Member of LOC of the *XI Marcel Grossman meeting*, Berlin, Germany
2002 – 2006	Director of the Computing Centre at SISSA, Trieste, Italy
2004 – 2013	Adjunct Professor at the Department of Physics and Astronomy, Louisiana State University, USA
2004 – 2006	Member of the Executive Board of the Italian Society of Gravitational Physics and Relativity (SIGRAV)
2004	Member of the Italian Society of Gravitational Physics and Relativity (SIGRAV)
2003	Co-Chair of LOC of the Conference *Sources of Gravitational Waves*, Trieste, Italy
2003	Co-Director of the *Advanced School on Sources of Gravitational Waves*, Trieste, Italy
2002 – 2004	Deputy Director of the Computing Centre at SISSA, Trieste, Italy

I am passionate about reaching out with my research. Over the years I have produced many images from the simulations that I have carried out. Many of them have been used by me and others for public outreach and have appeared on newspapers, magazines, calendars, and online; you can find many of them after searching for "black holes" or "neutron stars". Some of these images have also won prestigious awards. Animations of my simulations have ended up on the NASA YouTube totalling more than 1,000,000 downloads, eventually ending-up on the New York Times. In addition, I regularly provide interviews on popular radio shows in Germany (Deutsche Funke) and abroad (BBC, Italy), some of which have also appeared on journals such as The New Scientist.

SCIENTIFIC JOURNALS for which I act as Referee:

· *Annalen der Physik*,
· *Astroparticle Physics*,
· *Astrophysical Journal*,
· *Classical and Quantum Gravity*,
· *International Journal of Modern Physics A*,
· *Journal of Applied Mathematics and Physics*,
· *Journal of Cosmology and Astroparticle Physics (JCAP)*,
· *Journal of Geometry and Physics*,
· *Monthly Notices of the Royal Astronomical Society*,
· *Physical Review Letters*,
· *SIAM Journal on Scientific Computing*
· *Astronomy and Astrophysics*,
· *Astrophysical Journal Letters*,
· *Astrophysics and Space Science*,
· *General Relativity and Gravitation*,
· *International Journal of Modern Physics D*,
· *Journal of Computational Physics*,
· *Journal of Fluid Mechanics*,
· *Journal of High Energy Physics (JHEP)*,
· *Physical Review D*,
· *Physics Letters B*,

FUNDING AGENCIES for which I act as Referee:

· *Austrian Science Fund (FWF), Austria*
· *Danish Council for Independent Research, Denmark*
· *European Research Council (ERC), EU*
· *Israel Science Foundation (ISF), Israel*
· *Irish Research Council for Science (IRCSET), Ireland*
· *National Science Foundation (NSF), USA*
· *Org. for Scient. Research (NWO), The Netherlands*
· *Research Grants Council Hong Kong (CERG), China*
· *Swiss National Science Foundation (SNF), Switzerland*
· *Czech Academy of Science (CAS), Czech Republic*
· *Deutsche Forschungsgemeinschaft (DFG), Germany*
· *German-Israeli Foundation, Germany-Israel*
· *Italian Ministry of University and Research (MIUR), Italy*
· *National Research Foundation (NRF), South Africa*
· *Natural Sciences and Eng. Res. Council (NSERC), Canada*
· *Research Research Foundation Flanders (FWO), Belgium*
· *Science & Technology Facilities Council (STFC), UK*

BOOKS

2017	*The Physics and Astrophysics of Neutron Stars* **L. Rezzolla** et al., Editors, Springer Verlag, Heidelberg
2013	*Astrophysical Black Holes* **L. Rezzolla**, Chapter 1, Springer Verlag, Heidelberg
2013	*Relativistic Hydrodynamics* **L. Rezzolla**, O. Zanotti, Oxford University Press
2010	Editor of the Special Issue *MICRA2009* C. Ott, C. Pethick, and **L. Rezzolla**, Class. Quantum Grav. 27 (2010) 110302
2007	Editor of the Special Issue *New Frontiers in Numerical Relativity* M. Campanelli and **L. Rezzolla**, Class. Quantum Grav. 24 (2007) S1-S379
2001	Editor of the Proceedings Book *Gravitational Waves: A Challenge to Theoretical Astrophysics* V. Ferrari, J. C. Miller and **L. Rezzolla**, ICTP Lecture Series, Vol. 3, ISBN 92-95003-05-5

Research Grants (2006-2016)

2017 DFG Grant on strong-interaction matter (CRC-TR211).
Total budget: **260,000** EUR over four years.

2016 Postdoctoral fellowship from the Alexander von Humboldt Foundation (awarded to Dr. A. Nathanail).
Total budget: **80,000 EUR** over two years

2015 Horizon 2020 Research Grant, "Exahype".
Total budget: **450,000** EUR over four years.

2014 Postdoctoral fellowship from the Alexander von Humboldt Foundation (awarded to Dr. Z. Younsi).
Total budget: **80,000 EUR** over two years

2014 Postdoctoral fellowship from the Alexander von Humboldt Foundation (awarded to Dr. T. Hoang).
Total budget: **50,000 EUR** over one year

2013 Postdoctoral fellowship from the Alexander von Humboldt Foundation (awarded to Dr. A. Zhidenko).
Total budget: **80,000 EUR** over two years

2013 ERC Synergy Grant, "BlackHoleCam" (with H. Falcke and M. Kramer).
Total budget: about 1/3 of **14,000,000** EUR over six years. These grants represent the most prestigious and substantial form of funding in Europe and for the first time they were awarded for an astrophysics proposal.

2013 ESF COST Action, "NewCompStar".
Total budget: **600,000** EUR over four years.

2012 Volkswagen Stiftung for exchange programme with Uzbekistan.
Total budget: **80,000** EUR over three years.

2010 Postdoctoral fellowship from the Alexander von Humboldt Foundation (awarded to Dr. R. Ciolfi).
Total budget: **80,000 EUR** over two years

2010 DFG Grant on gravitational-wave astronomy (SFB-TR7).
Total budget: **480,000** EUR over four years.

2009 Marie Curie Reintegration Grant on Numerical Cosmology (awarded to Dr. E. Bentivegna).
Total budget: **75,000 EUR** over three years

2009 MPG Grant to purchase a new a supercomputing cluster.
Total budget: **1,070000,000 EUR** 2010

2009 Postdoctoral fellowship from the Alexander von Humboldt Foundation (awarded to Dr. J. L. Jaramillo).
Total budget: **80,000 EUR** over one year

2008 MPG Grant to upgrade the storage system of the local supercomputing cluster.
Total budget: **120,000 EUR**

2007 Postdoctoral fellowship from VESF (Virgo-EGO Scientific Council).
Total budget: **70,000 EUR** over two years

2009 Postdoctoral fellowship from the Alexander von Humboldt Foundation (awarded to Dr. C. Chirenti).
Total budget: **80,000 EUR** over one year

2006 MPG Grant to purchase a new supercomputing cluster (Damiana).
Total budget: **900,000 EUR** (Damiana ranked 197 in the "top-500" list and the 5th in Germany)

2006 Co-PI of `CompStar`, an ESF-funded research network on the physics of compact.
Total budget: **350,000 EUR** over five years

In addition to financial support for my research, over the last 10 years I have regularly applied and obtained computing time at supercomputer facilities in Italy, Germany and the USA. Overall, these requests amount to more than **240 Million hours**, for an estimated economical value of $\sim$ **8 Million EUR**. The latest of these grants (October 2017) is an allocation of **80 Million hours** on the German supercomputer SuperMUC; this is the largest allocation awarded to a scientist at the Goethe University in Frankfurt.

Research and Teaching Profile

I am a relativistic astrophysicist: *i.e.,* a physicists that uses Einstein's theory of general relativity to describe and explain astronomical observations of black holes and neutron stars. To do this I combine analytical and perturbative tools with numerical nonlinear simulations in which I solve the Einstein equations together with those of relativistic hydrodynamics or magnetohydrodynamics. I do this in the endless process of comparing theoretical results and predictions with astronomical observations. Previously an Associate Professor and Director of the Computing Centre at SISSA (Italy), and then a group leader at the Albert Einstein Institute in Potsdam, I am now the Director of the Institute for Theoretical Physics in Frankfurt. Furthermore, as Chair of Theoretical Astrophysics I lead a group of about 20 scientists, from undergraduate students over to senior postdocs (more information can be found on our web site `relastro.uni-frankfurt.de` Over the last 5 years the group, which is funded for almost 2/3 by external funds, has imposed itself as a solid reference in the fields of numerical relativity and astrophysical relativity, it has organised two major international conferences and has published more than 50 papers, with many of them having been published as letters in *PRL*, *ApJ* or *MNRAS*.

My research interests span a large spectrum, which goes from the accretion onto compact objects, over to the fundamental aspects of relativistic hydrodynamics and MHD and up to the modelling of sources of gravitational waves. The latter is the research topic I spend most of my time on. Because of the extreme physical conditions characterising compact astrophysical objects and their often catastrophic dynamics, most of my research is carried out in what I consider a in a *"relativistic-astrophysics laboratory"*. This is not a laboratory in the ordinary sense but, rather, it is a *virtual* one, a laboratory where the instruments are complex nonlinear equations and numerical algorithms, the pieces of equipment are fast and parallel supercomputers, the experiments are simulations investigating vast spaces of parameters, and the observations are the results of the visualization of enormous amounts of data. Because of this, over the last 20 years I have undertaken a long-term project aimed at building such a relativistic-astrophysics laboratory, in which the numerical solution of Einstein's equations, coupled with those of general relativistic hydrodynamics, magnetohydrodynamics (MHD) and radiative transfer will allow me and my team to investigate, *ab-initio* and accurately, the nonlinear aspects of the physical and astrophysical processes producing the rich observational phenomenology associated with compact objects. The result of this effort are state-of-the-art numerical codes that implement the most sophisticated numerical techniques and represent the state of the art in the solution of the Einstein equations in vacuum and non-vacuum spacetimes. These codes represent therefore, my *virtual* relativistic-astrophysics laboratory. I am deeply convinced that numerical simulations will play a fundamental role of any research in physics and astrophysics in the coming 30 years.

My future research plans revolve around the modelling the emissions from compact objects (neutron stars and black holes) in terms of gravitational waves, electromagnetic radiation or neutrino signals. This goal will be reached by improving and transforming our theoretical modelling of high-energy astrophysics through the exploitation of a sophisticated computational infrastructure to explore a variety of astrophysical problems. I expect that these scientific efforts will play a fundamental role in shaping the theoretical landscape in a number of present and future international experimental and observational efforts such as: LIGO/Virgo, the Event Horizon Telescope, LISA and third-generation gravitational-wave detectors such as the Einstein Telescope and LIGO Cosmic Explorer.

In addition to research, my scientific activity over the years has always been accompanied by an intense activity of teaching and student supervision. Over the last 16 years I have supervised 6 BSs students, 17 MSc students and 19 PhD students. Many of these students have pursued an academic career and have now faculty positions or are distinguished scientists: *E. Abdikamolov* (professor in Astana, Kazakhstan), *L. Baiotti* (professor in Osaka, Japan), *E. Barausse* (professor in Paris, France), *B. Giacomazzo* (professor in Trento, Italy), *P. Moesta* (NASA Einstein Fellow at UC Berkeley), *D. Radice* (Associate Research Scholar in Princeton), *O. Zanotti* (previously professor in Trento, Italy).

I have taught and continue to teach a variety of subjects at different levels. These range from more analytic courses (such as General Relativity, Advanced General Relativity, Astrophysics of Compact Objects, Astrophysical Relativity) to more computationally oriented ones (such as Numerical Methods for Astrophysics, Numerical Analysis of Hyperbolic and Parabolic Equations, Introduction to Numerical Relativity). A complete list of the courses given is presented in the CV.

Finally, much of my contributions to teaching and training are embodied in the book I have written in 2013 on "Relativistic Hydrodynamics". The book has received glowing reviews from the experts (see Oxford University Press) and general readers (see amazon.com), and is universally recognised as "... the definitive book on the subject..." (K. Thorne).
In addition, I am presently writing a book on General Relativity that collects my lecture notes on the courses "General Relativity" and "Advanced General Relativity".

Teaching Experience and Courses Given

FULL COURSES

2017 – 2018	*Advanced General Relativity*, Undergrad. Course, ITP Frankfurt (Winter Semester)
2017	*General Relativity*, Undergrad. Course, ITP Frankfurt (Summer Semester)
2016 – 2017	*Hydrodynamics and Magnetohydrodynamics*, Undergrad. Course, ITP Frankfurt (Winter Semester)
2016	*Advanced General Relativity*, Undergrad. Course, ITP Frankfurt (Summer Semester)
2015 – 2016	*General Relativity*, Undergrad. Course, ITP Frankfurt (Winter Semester)
2015	*Advanced General Relativity*, Undergrad. Course, ITP Frankfurt (Summer Semester)
2014 – 2015	*Hydrodynamics and Magnetohydrodynamics*, Undergrad. Course, ITP Frankfurt (Winter Semester)
2014	*Numerical Relativity*, Undergrad. Course, ITP Frankfurt (Summer Semester)

SERIES OF LECTURES AT SCHOOLS (2010–2016)

Sep.	2017	*NewCompStar School: Mathematical Foundations of Numerical Relativity*, Sofia, Bulgaria
Sep.	2016	*Giersch International Symposium: Introduction to General Relativity*, Frankfurt, Germany
Sep.	2016	*NewCompStar School: Neutron stars: gravitational physics theory and observations*, Coimbra, Portugal
Jan.	2014	*Astrophysics School: Look and Listen*, Playa del Carmen, Mexico
Apr.	2013	*Modelling black hole binaries*, VESF International School, Monte Porzio, Italy
Mar.	2013	*Introduction to numerical relativity*, IMPRS graduate course, Spreewald, Germany
Mar.	2012	*Advanced general relativity: Compact Objects*, Ferienkurs (spring-break course), AEI
May	2012	*Theoretical foundations of astrophysical black holes*, XI SIGRAV International School, Como, Italy
Feb.	2012	*Introduction to general relativity*, IMPRS graduate course, Germany
Mar.	2011	*Advanced general relativity: Compact Objects*, Ferienkurs (spring-break course), AEI
Feb.	2011	*Introduction to general relativity*, IMPRS graduate course, Erkner
Mar.	2010	*Modelling sources of gravitational waves*, Ferienkurs (spring-break course), AEI
Mar.	2010	*Numerical Methods in General Relativity*, IMPRS graduate course, Wandlitz, Germany
Feb.	2010	*Solution of hyperbolic PDEs*, Course given at the Computational Astrophysics Winter School, Caen, France

Graduate and Undergraduate Studies Advisees

Bachelor (BSc) Students:

2015–2016 *Cosima Breu*, Institute for Theoretical Physics, Frankfurt, Germany
2015–2016 *Fabian Hoffmann*, Institute for Theoretical Physics, Frankfurt, Germany
2015–2016 *David Kling*, Institute for Theoretical Physics, Frankfurt, Germany
2016–2017 *Stephan Wystub*, Institute for Theoretical Physics, Frankfurt, Germany
2017 *Matteo Lucca*, Institute for Theoretical Physics, Frankfurt, Germany
2017 *Bilal Ahmed*, Institute for Theoretical Physics, Frankfurt, Germany

2017 *Maria Ignacia Deisen Pinto*, Institute for Theoretical Physics, Frankfurt, Germany

Laurea-Diplom (MSc) Students:

1999–2000 *Ilia Musco*, University of Trieste (with J. C. Miller)
2001–2002 *Bruno Giacomazzo*, SISSA & University of Parma (with E. Onofri)
2003–2004 *Luca Naso*, SISSA & University of Catania (with A. Bonanno)
2004–2005 *Gregor Leiler*, SISSA & University of Udine
2007–2008 *Michael Jasiulek*, von Humboldt University, Berlin
2007–2008 *Filippo Galeazzi*, AEI & University of Padua, Italy
2007–2008 *Philipp Moesta*, AEI & University of Kassel, Germany
2008–2009 *David Link*, von Humboldt University, Berlin, Germany
2008–2009 *David Radice*, AEI & Politecnico di Milano, Milano
2013–2014 *Francesca Lepori*, AEI & Udine University, Italy
2014–2015 *Fabian Mueller*, Institute for Theoretical Physics, Frankfurt, Germany
2016–2017 *Elias Most*, Institute for Theoretical Physics, Frankfurt, Germany
2016–2017 *Natascha Wechselberger*, Institute for Theoretical Physics, Frankfurt, Germany
2016–2017 *Lukas Weih*, Institute for Theoretical Physics, Frankfurt, Germany
2016–2017 *David Kling*, Institute for Theoretical Physics, Frankfurt, Germany
2016–2017 *Cosima Breu*, Institute for Theoretical Physics, Frankfurt, Germany
2018–2019 *Jonas Köhler*, Institute for Theoretical Physics, Frankfurt, Germany
2018–2019 *Michail Chabanov*, Institute for Theoretical Physics, Frankfurt, Germany

Ph.D. Students:

1999–2002 *Olindo Zanotti*, SISSA; now researcher at Trento Univ., Italy
2000–2004 *Luca Baiotti*, SISSA; now Ass. Prof. at Osaka Univ., Japan
2000–2004 *Pedro Montero-Muriel*, SISSA (with J. Miller); now consultant at LRZ Garching, Germany
2002–2005 *Bruno Giacomazzo*, SISSA; now assistant prof. at Trento Univ., Italy
2004–2008 *Enrico Barausse*, SISSA; now faculty at IAP, Paris, France
2005–2009 *Ernazar Abdikamalov*, SISSA (with J. Miller); now faculty at Astana, Kazakhstan
2006–2010 *Christian Reisswig*, AEI; now consultant in private company, Berlin, Germany
2006–2010 *Jennifer Seiler*, AEI; now consultant in private company, San Francisco, USA
2009–2012 *Philipp Moesta*, AEI; now postdoc at Berkley, USA
2005–2012 *Thorsten Kellermann*, AEI; now consultant in private company, Munich, Germany
2010–2013 *David Radice*, AEI; now postdoc at Princeton, USA
2008–2014 *Filippo Galeazzi*, AEI; consultant in private company, Bremen, Germany
2013–2015 *Joachim Frieben*, AEI
2009–2015 *Kyriaki Dionysopoulou*, AEI; now consultant in private company, Southampton, UK
2014–2017 *Luke Bovard*, Institute for Theoretical Physics, Frankfurt, Germany
2014–2017 *Federico Guercilena*, Institute for Theoretical Physics, Frankfurt, Germany

2015–2019 *Sven Köppel*, Institute for Theoretical Physics, Frankfurt, Germany
2016–2018 *Enping Zhou*, ITP Frankfurt and Peking University, Beijing, China
2016–2019 *Hector Olivares*, Institute for Theoretical Physics, Frankfurt, Germany
2017– *Elias Most*, Institute for Theoretical Physics, Frankfurt, Germany
2018– *Lukas Weih*, Institute for Theoretical Physics, Frankfurt, Germany
2018– *Markus Meyer*, Institute for Theoretical Physics, Frankfurt, Germany
2019– *Jonas Köhler*, Institute for Theoretical Physics, Frankfurt, Germany
2019– *Michail Chabanov*, Institute for Theoretical Physics, Frankfurt, Germany

Recent Publications (2010-2017)

I have published more than **200** papers on various refereed journals (more than 15 on The Astrophysical Journal Letters, more than 12 on Physical Review Letters, and more than 8 on Monthly Notices of the Royal Astronomical Society) and about **55** papers as contributions to proceedings. The complete list can be found on the NASA ADS server, which also reports more than **11,500 citations** to these works and an **h-index: 62**. Google scholar reports instead about **14,000 citations** and an **h-index: 67**.
Reported below are the publications on refereed journals relative to the last seven years only.

References

[1] L. Baiotti and **L. Rezzolla**. *Binary neutron star mergers: a review of Einstein's richest laboratory*. Reports on Progress in Physics, 80 096901, (2017).

[2] L. Bovard, D. Martin, F. Guercilena, A. Arcones, **L. Rezzolla**, and O. Korobkin. *On r-process nucleosynthesis from matter ejected in binary neutron star mergers*. Phys. Rev. D, in press, (2017).

[3] M. G. de Avellar, O. Porth, Z. Younsi, and **L. Rezzolla**. *The kilo Hertz quasi-periodic oscillations in neutron star low-mass X-ray binaries as tori oscillation modes. I.* ArXiv e-prints 1709.07706, (2017).

[4] L. R. Weih, E. R. Most, and **L. Rezzolla**. *On the stability and maximum mass of differentially rotating relativistic stars*. Mon. Not. R. Astron. Soc. , in press, (2017).

[5] M. Hanauske, K. Takami, L. Bovard, **L. Rezzolla**, J. A. Font, F. Galeazzi, and H. Stöcker. *Rotational properties of hypermassive neutron stars from binary mergers*. Phys. Rev. D, 96 043004, (2017).

[6] A. Nathanail, E. R. Most, and **L. Rezzolla**. *Gravitational collapse to a Kerr-Newman black hole*. Mon. Not. R. Astron. Soc. , 469 L31–L35, (2017).

[7] F. Guercilena, D. Radice, and **L. Rezzolla**. *Entropy-limited hydrodynamics: a novel approach to relativistic hydrodynamics*. Computational Astrophysics and Cosmology, 4 3, (2017).

[8] M. Dumbser, F. Guercilena, S. Koeppel, **L. Rezzolla**, and O. Zanotti. *A strongly hyperbolic first-order CCZ4 formulation of the Einstein equations and its solution with discontinuous Galerkin schemes*. ArXiv e-prints 1707.09910, (2017).

[9] M. G. Alford, L. Bovard, M. Hanauske, **L. Rezzolla**, and K. Schwenzer. *On the importance of viscous dissipation and heat conduction in binary neutron-star mergers*. ArXiv e-prints 1707.09475, (2017).

[10] J. L. Friedman, L. Lindblom, **L. Rezzolla**, and A. I. Chugunov. *Limits on Magnetic Field Amplification from the r-Mode Instability*. ArXiv e-prints 1707.09419, (2017).

[11] V. Roy, S. Pu, **L. Rezzolla**, and D. H. Rischke. *Effect of intense magnetic fields on reduced-MHD evolution in* $\sqrt{s\_\mathrm{NN}}$ *= 200 GeV Au+Au collisions*. ArXiv e-prints 1706.05326, (2017).

[12] O. Porth, H. Olivares, Y. Mizuno, Z. Younsi, **L. Rezzolla**, M. Moscibrodzka, H. Falcke, and M. Kramer. *The black hole accretion code*. Computational Astrophysics and Cosmology, 4 1, (2017).

[13] S. Bose, K. Chakravarti, **L. Rezzolla**, B. S. Sathyaprakash, and K. Takami. *Neutron-star Radius from a Population of Binary Neutron Star Mergers*. ArXiv e-prints 1705.1085, (2017).

[14] L. Bovard and **L. Rezzolla**. *On the use of tracer particles in simulations of binary neutron stars*. Class. Quantum Grav., in press, (2017).

[15] C. M. Fromm, M. Perucho, O. Porth, Z. Younsi, E. Ros, Y. Mizuno, J. A. Zensus, and **L. Rezzolla**. *Jet-torus connection in radio galaxies: Relativistic hydrodynamics and synthetic emission*. Astronomy and Astrophysics, in press, (2017).

[16] A. Murguia-Berthier, E. Ramirez-Ruiz, G. Montes, F. De Colle, **L. Rezzolla**, S. Rosswog, K. Takami, A. Perego, and W. H. Lee. *The Properties of Short Gamma-Ray Burst Jets Triggered by Neutron Star Mergers*. Astrophys. J., Lett., 835 L34, (2017).

[17] Z. Meliani, Y. Mizuno, H. Olivares, O. Porth, **L. Rezzolla**, and Z. Younsi. *Simulations of recoiling black holes: adaptive mesh refinement and radiative transfer*. Astronomy and Astrophysics, 598 A38, (2017).

[18] C. Goddi, H. Falcke, M. Kramer, **L. Rezzolla**, and al. *BlackHoleCam: Fundamental physics of the galactic center*. International Journal of Modern Physics D, 26 1730001–239, 2017.

[19] Z. Younsi, A. Zhidenko, **L. Rezzolla**, R. Konoplya, and Y. Mizuno. *New method for shadow calculations: Application to parametrized axisymmetric black holes*. Phys. Rev. D, 94 084025, (2016).

[20] C. Chirenti and **L. Rezzolla**. *Did GW150914 produce a rotating gravastar?* Phys. Rev. D, 94 084016, (2016).

[21] A. Tsokaros, B. C. Mundim, F. Galeazzi, **L. Rezzolla**, and K. Uryū. *Initial-data contribution to the error budget of gravitational waves from neutron-star binaries*. Phys. Rev. D, 94 044049, (2016).

[22] D. Radice, F. Galeazzi, J. Lippuner, L. F. Roberts, C. D. Ott, and **L. Rezzolla**. *Dynamical mass ejection from binary neutron star mergers*. Mon. Not. R. Astron. Soc. , 460 3255–3271, (2016).

[23] **L. Rezzolla** and B. J. Ahmedov. *Electromagnetic fields in the exterior of an oscillating relativistic star - II. Electromagnetic damping*. Mon. Not. R. Astron. Soc. , 459 4144–4160, (2016).

[24] L. Baiotti and **L. Rezzolla**. *Binary neutron-star mergers: a review of Einstein's richest laboratory*. ArXiv e-prints, (2016).

[25] F. Hofmann, E. Barausse, and **L. Rezzolla**. *The Final Spin from Binary Black Holes in Quasi-circular Orbits*. Astrophys. J., Lett., 825 L19, (2016).

[26] **L. Rezzolla** and K. Takami. *Gravitational-wave signal from binary neutron stars: A systematic analysis of the spectral properties*. Phys. Rev. D, 93 124051, (2016).

[27] C. Goddi, H. Falcke, M. Kramer, **L. Rezzolla**, et al. *BlackHoleCam: fundamental physics of the Galactic center*. ArXiv e-prints, (2016).

[28] Z. Meliani, Y. Mizuno, H. Olivares, O. Porth, **L. Rezzolla**, and Z. Younsi. *Simulations of recoiling black holes: adaptive mesh refinement and radiative transfer*. ArXiv e-prints, (2016).

[29] N. T. Bishop and **L. Rezzolla**. *Extraction of Gravitational Waves in Numerical Relativity*. ArXiv e-prints, (2016).

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Recent Colloquia and Seminars (2015-2017)

Reported below are the Seminars and Colloquia given between 2015 and 2017 only.

13.01.2015 *Modelling the most catastrophic events in the universe*,
Colloquium, Maison de a Simulation, Saclay, France

28.01.2015 *Modelling the most catastrophic astrophysical events in the Universe*,
Colloquium, Department of Physics, Tübingen, Germany

20.03.2015 *Neutron-star binaries: Einstein's richest laboratory*,
Invited Talk, Spring meeting of the German Physical Society, Berlin, Germany

28.04.2015 *Modelling the most catastrophic events in the universe*,
Colloquium, Nijemegen, The Netherlands

05.05.2015 *Radiative signatures of binary neutron-star mergers*,
Invited Talk, Fourth Galileo-Xu Guangqi Meeting Beijing, China

18.05.2015 *FRBs and Blitzars*,
Invited Talk, Neutron-star Days, Bonn, Germany

05.05.2015 *Radiative signatures of binary neutron-star mergers*,
Invited Talk, Fourth Galileo-Xu Guangqi Meeting Beijing, China

28.05.2015 *Merging binary neutron stars: a progress report from Frankfurt*,
Invited Talk, Workshop on binary neutron star mergers, Thessaloniki, Greece

10.06.2015 *The physics and astrophysics of merging NS binaries*,
Invited Talk, CRC 634 Concluding Conference, Darmstadt, Germany

19.06.2015 *A journey into Einstein's theory of gravity*,
Public Lecture, Frankfurt University, Germany

09.07.2015 *Merging binary neutron stars: a brief review*,
Invited Talk, Compact Stars and Black holes Tübingen 07-09-07, 2015, Tübingen, Germany

13.07.2015 *A new paradigm for short gamma-ray bursts*,
Invited Talk, parallel session I, 14th Marcel Grossmann, Rome, Italy

14.07.2015 *Coordinate independent description of BH shadows*,
Invited Talk, parallel session II, 14th Marcel Grossmann, Rome, Italy

14.07.2015 *Theoretical work of the BlackHoleCam project*,
Invited Talk, parallel session III, 14th Marcel Grossmann, Rome, Italy

22.07.2015 *Binary neutron stars, GRBs and FRBs: simulating catastrophic events in general relativity*,
Colloquium, Department of Physics and Astrophysics, Oxford, UK

24.07.2015 *On gravitational collapse in astrophysics*,
Invited Talk, Karl Schwarzschild Meeting, Rome, Italy

08.09.2015 *Using gravitational waves to understand neutron stars*,
Invited Talk, Workshop on SN and NSs, Munich, Germany

16.09.2015 *Using gravitational waves to understand neutron stars*,
Invited Talk, ECT*, Trento, Italy

20.09.2015 *On quasi-universal relations from binary neutron stars*,
Invited Talk, Workshop on universal relations, Bremen, Germany

13.11.2015 *Modelling the most catastrophic astrophysical events in the Universe*,
Colloquium, Higgs Centre, Edinburgh, UK

25.04.2016 *Gravitational-wave signal from binary neutron stars*,
Invited Talk, NewCompStar Annual Conference Istanbul, Turkey

09.05.2016 *Numerical modeling of SGRBs: from the ground up*,
Invited Talk, 2nd Workshop on Relativistic Plasma Astrophysics Purdue University, USA

18.05.2016 *Black holes, neutron stars and gravitational waves: exploring Einstein universe with supercomputers*,
Sonderkolloquium, Todestag von Karl Schwarzschild, Frankfurt, Germany

07.06.2016 *The physics and astrophysics of merging neutron-star binaries*,
Colloquium, GSI-FAIR, Darmstadt, Germany

20.06.2016 *Black holes, neutron stars and gravitational waves: exploring Einstein universe with supercomputers*,
Colloquium, Department of Physics, Giessen, Germany

04.07.2016 *Numerical modeling of SGRBs: from the ground up*,
Invited Talk, European Week of Astronomy Space Science, Athens, Greece

07.07.2016 *Black holes, neutron stars and gravitational waves: exploring Einstein universe with supercomputers*,
Invited Talk, 5th International Conference on New Frontiers in Physics Kolymbari, Greece

10.07.2016 *A different kind of accretion and jet formation*,
Invited Talk, Simulations and Modelling of Relativistic MHD Accretion Discs Oxford, UK

04.08.2016 *The physics and astrophysics of merging neutron-star binaries*,
Colloquium, NCSA, Urbana, USA

10.08.2016 *Modelling of short gamma-ray bursts: from the ground up*,
Colloquium, NASA, Goddard, USA

30.08.2016 *The physics and astrophysics of binary neutron stars mergers: two birds with a stone*,
Invited Talk, Gravitational-wave Astronomy Meeting, Paris, France

12.09.2016 *The physics and astrophysics of binary neutron stars mergers*,
Invited Talk, XXII SIGRAV Conference, Cefalu', Italy

13.09.2016 *Buchi neri, stelle di neutroni e onde gravitazionali: un viaggio nell'universo di Einstein*,
Public Lecture, Cefalu', Italy

29.09.2016 *The physics and astrophysics of binary neutron stars mergers*,
Invited Talk, 3rd Conference of the Polish Society on Relativity, Cracow, Poland

09.10.2016 *Gravitational waves and neutron star mergers*,
Invited Talk, Foundations of the Theory of Gravitational Waves, Stockholm, Sweden

13.10.2016 *When hydrodynamics is general relativistic*,
Invited Talk, Workshop on Frontiers of Hydrodynamics, Mainz, Germany

30.10.2016 *A brief history of NR and a future of opportunities for HF detectors*,
Invited Talk, GEO600 Anniversary Meeting, Palma de Mallorca, Spain

18.11.2016 *Compact stars and GWs: a progress report from Frankfurt*,
Invited Talk, NPCSM, Yukawa Institute, Kyoto, Japan

23.11.2016 *The physics and astrophysics of binary neutron stars mergers*,
Colloquium, Albert Einstein Institute, Potsdam, Germany

08.12.2016 *The physics and astrophysics of binary neutron stars mergers*,
Colloquium, CERN Theory Division, Geneve, Switzerland

14.12.2016 *The physics and astrophysics of binary neutron stars mergers*,
Colloquium, Scuola Normale Superiore, Pisa, Italy

02.02.2017 *The physics and astrophysics of merging neutron-star binaries*,
Colloquium, Physics Department, Bonn, Germany

28.02.2017 *The physics and astrophysics of merging neutron-star binaries*,
Colloquium, Kavli Institute, MIT, Boston, USA

29.02.2017 *All you ever wanted to know about binary neutron star mergers (and never bothered to ask)*,
Colloquium, MIT-LIGO Lab, Boston, USA

21.03.2017 *Modelling the most catastrophic astrophysical events in the universe*,
Colloquium, Astronomical Observatory, Trieste, Italy

22.03.2017 *The physics and astrophysics of merging neutron-star binaries*,
Colloquium, Department of Physics, Trieste, Italy

23.03.2017 *The physics and astrophysics of merging neutron-star binaries*,
Colloquium, Department of Physics, Ferrara, Italy

24.03.2017 *Merging systems of binary neutron stars*,
Colloquium, Department of Physics, Bologna, Italy

27.03.2017 *Status of numerical relativity simulations of neutron stars*,
Invited Talk, NewCompSstar Annual Meeting, Warsaw, Poland

05.04.2017 *The physics and astrophysics of merging neutron-star binaries*,
Colloquium, ESO, Garching, Germany

04.05.2017 *Binary neutron stars: Einstein's richest laboratory*,
Colloquium, Institute for Theoretical Physics, Heidelberg, Germany

11.05.2017 *State-of-the-art modelling of post-merger signal*,
Colloquium, Physics Department, Birmingham, UK

07.06.2017 *Physics and astrophysics of neutron-star binaries: news from Frankfurt*,
Invited Talk, Workshop on Nuclear Matter and Astrophysics, ECT*, Trento, Italy

15.06.2017 *The physics and astrophysics of binary neutron stars mergers*,
Colloquium, Albert Einstein Institute, Hannover, Germany

20.06.2017 *Physics and astrophysics of neutron-star binaries*,
Invited Talk, Extreme Gravity Stars Workshop, Stockholm, Sweden

28.06.2017 *Modelling merging binary neutron stars in Frankfurt: present status and prospects*,
Invited Talk, Advanced Computing Meeting, Department of Physics, Zurich, Switzerland

28.06.2017 *The physics and astrophysics of merging neutron-star binaries*,
Invited Talk, Discoveries at the Frontiers of Science, Memorial Symposium for W. Greiner, Frankfurt, Germany

03.07.2017 *The physics and astrophysics of merging NS binaries: a report from Frankfurt*,
Invited Talk, Strong Gravity Universe, Azores Islands, Portugal

15.07.2017 *From gravitational-wave spectroscopy to nuclear EOS*,
Invited Talk, Strangeness in Quark Matter, Utrecht, The Netherlands

25.07.2017 *The physics and astrophysics of binary neutron stars mergers*,
Colloquium, IEEC, Barcelona, Spain

16.10.2017 *On Symmetry Restoration in General Relativity*,
Invited Talk, Symmetry 2017, Barcelona, Spain

Referees

The scientists below have expressed their willingness to provide reference letters. All of them have rather complex agendas but have agreed to send their reviews within two weeks from a request.

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