Christian Reisswig: List of publications

Total citations: 2261 (NASA ADS), h-index: 27 (NASA ADS)

Published and Accepted

1. A. Nagar, T. Damour, C. Reisswig, D. Pollney, *Energetics and phasing of nonprecessing spinning coalescing black hole binaries*, Phys. Rev. D93, 4 (2016)
2. E. Abdikamalov, C. D. Ott, D. Radice, L. F. Roberts, R. Haas, C. Reisswig, P. Moesta, H. Klion, E. Schnetter, *Neutrino-driven Turbulent Convection and Standing Accretion Shock Instability in Three-Dimensional Core-Collapse Supernovae*, Astrophys. J., 808, 70 (2015)
3. V. Fafone, P. J. Sutton, N. Cornish, C. Reisswig, R. Sturani, A. L. Stuver, *Summary of session C6: Q & A - everything you wanted to know about gravitational waves but were afraid to ask*, Gen. Rel. Grav., 46:1782 (2014)
4. P. Mösta, S. Richers, C. D. Ott, R. Haas, A. L. Piro, K. Boydstun, E. Abdikamalov, C. Reisswig, E. Schnetter *Magnetorotational Core-Collapse Supernovae in Three Dimensions*, Astrophys. J. Lett., 785, 2, L29 (2014).
5. The LIGO Scientific Collaboration, the Virgo Collaboration, the NINJA-2 Collaboration, *The NINJA-2 project: Detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations*, Class. Quantum Grav. 31 115004 (2014).
6. N. W. Taylor, M. Boyle, C. Reisswig, M. A. Scheel, T. Chu, L. E. Kidder, B. Szilagyi *Comparing Gravitational Waveform Extrapolation to Cauchy-Characteristic Extraction in Binary Black Hole Simulations*, Phys. Rev. D 88, 124010 (2013).
7. N. Bishop, C. Reisswig, *The gravitational wave strain in the characteristic formalism of numerical relativity*, Gen. Rel. Grav., 46:1643 (2013).
8. I. Hinder et al. (NRAR Collaboration), *Error-analysis and comparison to analytical models of numerical waveforms produced by the NRAR Collaboration*, Class. Quantum Grav. 31 025012 (2014).
9. P. Mösta, B. C. Mundim, J. A. Faber, R. Haas, S. C. Noble, T. Bode, F. Löffler, C. D. Ott, C. Reisswig, E. Schnetter, *GRHydro: A new open source general-relativistic magnetohydrodynamics code for the Einstein Toolkit*, Class. Quantum Grav. 31, 015005 (2013)
10. N. Andersson et al., *The Transient Gravitational-Wave Sky*, Class. Quantum Grav. 30 193002 (2013).
11. C. Reisswig, C. D. Ott, E. Abdikamalov, R. Haas, P. Mösta, E. Schnetter, *Formation and Coalescence of Cosmological Supermassive Black Hole Binaries in Supermassive Star Collapse*, Phys. Rev. Lett. 111, 151101 (2013).
12. C. D. Ott, E. Abdikamalov, P. Moesta, R. Haas, S. Drasco, E. O'Connor, C. Reisswig, C. Meakin, E. Schnetter, *General-Relativistic Simulations of Three-Dimensional Core-Collapse Supernovae*, Astrophys. J., 768, 115, (2013).
13. C. Reisswig, R. Haas, C. D. Ott, E. Abdikamalov, P. Moesta, D. Pollney, E. Schnetter, *Three-Dimensional General-Relativistic Hydrodynamic Simulations of Binary Neutron Star Coalescence and Stellar Collapse with Multipatch Grids*, Phys. Rev. D 87, 064023 (2013).
14. C. Reisswig, N. T. Bishop, D. Pollney, *General relativistic null-cone evolutions with a high-order scheme*, Gen. Rel. Grav. 45 (5), pp 1069-1094 (2013).
15. C. D. Ott, E. Abdikamalov, E. O'Connor, C. Reisswig, R. Haas, P. Kalmus, S. Drasco, A. Burrows, E. Schnetter, *Correlated Gravitational Wave and Neutrino Signals from General-Relativistic Rapidly Rotating Iron Core Collapse*, Phys. Rev. D86, 024026 (2012).
16. P. Ajith et al, *The NINJA-2 catalog of hybrid post-Newtonian/numerical-relativity waveforms for non-precessing black-hole binaries*, Class. Quantum Grav. 29, 124001 (2012).
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18. C. Reisswig, D. Pollney, *Notes on the integration of numerical relativity waveforms*, Class. Quantum Grav. 28, 195015 (2011).

19. N. T. Bishop, D. Pollney, C. Reisswig, *Initial data transients in binary black hole evolutions*, Class. Quantum Grav. 28, 155019 (2011).

20. P. Ajith, M. Hannam, S. Husa, Y. Chen, B. Bruegmann, N. Dorband, D. Mueller, F. Ohme, D. Pollney, C. Reisswig, L. Santamaria, J. Seiler, *Inspiral-merger-ringdown waveforms for black-hole binaries with non-precessing spins*, Phys. Rev. Lett. 106, 241101 (2011).

21. C. D. Ott, C. Reisswig, E. Schnetter, E. O'Connor, U. Sperhake, F. Löffler, P. Diener, E. Abdikamalov, I. Hawke, and A. Burrows, *Dynamics and Gravitational Wave Signature of Collapsar Formation*, Phys. Rev. Lett. 106, 161103 (2011).

22. C. Reisswig, C. D. Ott, U. Sperhake, E. Schnetter, *Gravitational Wave Extraction in Simulations of Rotating Stellar Core Collapse*, Phys. Rev. D 83, 064008 (2011).

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26. D. Pollney, C. Reisswig, E. Schnetter, E. N. Dorband, P. Diener, *High accuracy binary black hole simulations with an extended wave zone*, Phys. Rev. D 83, 044045 (2011).

27. D. Pollney, C. Reisswig, E. Schnetter, E. N. Dorband, P. Diener, *The Asymptotic Falloff of Local Waveform Measurements in Numerical Relativity*, Phys. Rev. D80, 121502 (2009).

28. C. Reisswig, N. T. Bishop, D. Pollney, B. Szilagyi, *Unambiguous determination of gravitational waveforms from binary black hole mergers*, Phys. Rev. Lett. 103, 221101 (2009).

29. C. Reisswig, S. Husa, L. Rezzolla, E. N. Dorband, D. Pollney, J. Seiler, *Gravitational-wave detectability of equal-mass black-hole binaries with aligned spins*, Phys. Rev. D80, 124026 (2009).

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31. B. Aylott et al, *Testing gravitational-wave searches with numerical relativity waveforms: Results from the first Numerical INJection Analysis (NINJA) project*, Class. Quantum Grav. 26, 165008 (2009).

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33. E. Schnetter, C. D. Ott, P. Diener, C. Reisswig, *Astrophysical applications of numerical relativity – from Teragrid to Petascale*, The 3rd annual TeraGrid Conference, TeraGrid '08 (2008).

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36. L. Rezzolla, E. N. Dorband, C. Reisswig, P. Diener, D. Pollney, E. Schnetter, B. Szilagyi, *Spin Diagrams for Equal-Mass Black-Hole Binaries with Aligned Spins*, Astrophys. J. 679, 1422-1426 (2008).

37. D. Pollney, C. Reisswig, L. Rezzolla, B. Szilagyi, M. Ansorg, B. Deris, P. Diener, E. N. Dorband, M. Koppitz, A. Nagar, E. Schnetter, *Recoil velocities from equal-mass binary black-hole mergers: a systematic investigation of spin-orbit aligned configurations*, Phys. Rev. D76, 124002 (2007).

38. M. Koppitz, D. Pollney, C. Reisswig, L. Rezzolla, J. Thornburg, P. Diener, E. Schnetter, *Recoil Velocities from Equal-Mass Binary-Black-Hole Mergers*, Phys. Rev. Lett. 99, 041102 (2007).

39. C. Reisswig, N. T. Bishop, C. W. Lai, J. Thornburg, B. Szilagyi, *Characteristic evolutions in numerical relativity using six angular patches*, Class. Quantum Grav. 24, S327-S340 (2007).

Theses

C. Reisswig, *Binary Black Hole Mergers and Novel Approaches to Gravitational Wave Extraction in Numerical Relativity*, Doctoral Thesis in Physics, Leibniz Universität Hannover, February, 2010.

C. Reisswig, *A characteristic Einstein evolution code in adapted coordinates*, Diploma Thesis in Physics, Leibniz Universität Hannover, October, 2006.