

PUBLICATIONS

(Papers accepted for publication in refereed journals are indicated with a bullet, ●)

L. Z. Kelley, I. Mandel, E. Ramirez-Ruiz. 2012. Electromagnetic transients as triggers in searches for gravitational waves from compact binary mergers. arXiv:1209.3027

K. Belczynski, T. Bulik, I. Mandel, B. S. Sathyaprakash, A. Zdziarski, J. Mikolajewska. 2012. Cyg X-3: a Galactic double black hole or black hole-neutron star progenitor. arXiv:1209.2658

J. Chennamangalam, D. R. Lorimer, I. Mandel, M. Bagchi. 2012. Constraining the luminosity function parameters and population size of radio pulsars in globular clusters. arXiv:1207.5732

M. Dominik, K. Belczynski, C. Fryer, D. Holz, E. Berti, T. Bulik, I. Mandel, R. O'Shaughnessy. 2012. Double Compact Objects I: The Significance Of The Common Envelope On Merger Rates. arXiv:1202.4901

● J. Veitch, I. Mandel, B. Aylott, B. Farr, V. Raymond, C. Rodriguez, M. van der Sluys, V. Kalogera, A. Vecchio. 2012. Estimating parameters of coalescing compact binaries with proposed advanced detector networks. Phys. Rev. D 85, 104045. arXiv:1201.1195

● C. L. Rodriguez, I. Mandel, J. R. Gair. 2012. Verifying the no-hair property of massive compact objects with intermediate-mass-ratio-inspirals in advanced gravitational-wave detectors. Phys. Rev. D 85, 062002. arXiv:1112.1404

● S. Vitale, W. Del Pozzo, T. G. F. Li, C. Van Den Broeck, I. Mandel, B. Aylott, J. Veitch. 2011. Effect of calibration errors on Bayesian parameter estimation for gravitational wave signals from inspiral binary systems in the Advanced Detectors era. Phys. Rev. D 85, 064034. arXiv:1111.3044

I. Mandel, L. Z. Kelley, E. Ramirez-Ruiz. 2011. Towards improving the prospects for coordinated gravitational-wave and electromagnetic observations. arXiv:1111.0005

● S. R. Taylor, J. R. Gair, I. Mandel. 2012. Hubble without the Hubble: cosmology using advanced gravitational-wave detectors alone. Phys. Rev. D 85:023535. arXiv:1108.5161

W. Farr and I. Mandel. 2011. An Efficient Interpolation Technique for Jump Proposals in Reversible-Jump Markov Chain Monte Carlo Calculations. arXiv:1104.0984

● J. Abadie et al. (LIGO Scientific Collaboration and Virgo Collaboration), as internal reviewer. 2011. Search for gravitational waves from binary black hole inspiral, merger and ringdown. Phys. Rev. D 83:122005. arXiv:1102.3781

● W. Farr, N. Sravan, A. Cantrell, L. Kreidberg, C. D. Bailyn, I. Mandel, V. Kalogera. 2011. The Mass Distribution of Stellar-Mass Black Holes. ApJ 741, 103. arXiv:1011.1459

● L. Z. Kelley, E. Ramirez-Ruiz, M. Zemp, J. Diemand, I. Mandel. 2010. The Distribution of Coalescing Compact Binaries in the Local Universe: Prospects for Gravitational-Wave Observations. ApJL 725, L91. arXiv:1011.1256

● M. Punturo et al. 2010. Third generation of gravitational wave observatories and their science reach. Class. Quantum Grav. 27, 084007.

● J. Abadie et al. (LIGO Scientific Collaboration and Virgo Collaboration), as lead author. 2010. Predictions for the Rates of Compact Binary Coalescences Observable by Ground-based Gravitational-

wave Detectors. *Class. Quant. Grav.* 27, 173001. arXiv:1003.2480

I. Mandel, R. O'Shaughnessy, V. Kalogera. 2010. Unraveling Binary Evolution from Gravitational-Wave Signals and Source Statistics. arXiv:1001.2583

- I. Mandel. 2010. Parameter estimation on gravitational waves from multiple coalescing binaries. *Phys. Rev. D* 81, 084029. arXiv: 0912.5531

I. Mandel, J. R. Gair, M. C. Miller. 2010. Detecting coalescences of intermediate-mass black holes in globular clusters with the Einstein Telescope. arXiv:0912.4925

- V. Raymond, M. V. van der Sluys, I. Mandel, V. Kalogera, C. Roever, N. Christensen. 2010. The effects of LIGO detector noise on a 15-dimensional Markov-chain Monte-Carlo analysis of gravitational-wave signals. *Class. Quantum Grav.* 27, 114009. arXiv:0912.3746

- I. Mandel and R. O'Shaughnessy. 2010. Compact Binary Coalescences in the Band of Ground-based Gravitational-Wave Detectors. *Class. Quantum Grav.* 27, 114007. arXiv:0912.1074

- S. Babak et al. (Mock LISA Data Challenge Team). 2010. The Mock LISA Data Challenges: from Challenge 3 to Challenge 4 *Class. Quantum Grav.* 27, 084009. arXiv:0912.0548

- J. Gair, I. Mandel, M. C. Miller, M. Volonteri. 2011. Exploring intermediate and massive black-hole binaries with the Einstein Telescope. *General Relativity and Gravitation*, 43, 485-518. arXiv:0907.5450

- J. Gair, I. Mandel, A. Sesana, A. Vecchio. 2009. Probing seed black holes using the next generation of gravitational-wave detectors. *Class. Quant. Grav.* 26, 204009. arXiv:0907.3292

- L. Cadonati et al. (NINJA collaboration). 2009. Status of NINJA: the numerical INJection Analysis project. *Class. Quant. Grav.* 26, 114008. arXiv:0905.4227

- M. van der Sluys, I. Mandel, V. Raymond, V. Kalogera, C. Roever, N. Christensen. 2009. Parameter estimation for signals from compact binary inspirals injected into LIGO data. *Class. Quant. Grav.* 26, 204010. arXiv:0905.1323

- A. Sesana, J. Gair, I. Mandel, A. Vecchio. 2009. Observing gravitational waves from the first generation of black holes. *ApJL* 698, L129. arXiv:0903.4177

- B. Aylott et al. (NINJA collaboration). 2009. Testing gravitational-wave searches with numerical relativity waveforms: Results from the first Numerical INJection Analysis (NINJA) project. *Class. Quant. Grav.* 26, 165008. arXiv:0901.4399

- V. Raymond, M. van der Sluys, I. Mandel, V. Kalogera, C. Roever, N. Christensen. 2009. Degeneracies in Sky Localisation Determination from a Spinning Coalescing Binary through Gravitational Wave Observations: a Markov-Chain Monte-Carlo Analysis for two Detectors. *Class. Quant. Grav.* 26, 114007. arXiv:0812.4302

- K. G. Arun et al. (LISA PE taskforce). 2009. Massive Black Hole Binary Inspirals: Results from the LISA Parameter Estimation Taskforce. *Class. Quant. Grav.* 26, 094027. arXiv: 0811.1011

- I. Mandel, J. R. Gair. 2009. Can we Detect Intermediate Mass Ratio Inspirals? *Class. Quant. Grav.* 26, 094036. arXiv:0811.0138

- M. van der Sluys, C. Roever, A. Stroeer, V. Raymond, I. Mandel, N. Christensen, V. Kalogera,

R. Meyer, A. Vecchio. 2008. Gravitational-Wave Astronomy with Inspiral Signals of Spinning Compact-Object Binaries. *ApJL* 688, L61. arXiv:0710.1897

- S. Babak et al. (Mock LISA Data Challenge Team). 2008. The Mock LISA Data Challenges: from Challenge 1B to Challenge 3. *Class. Quant. Grav.* 25, 184026. arXiv:0806.2110

- M. van der Sluys, V. Raymond, I. Mandel, C. Roever, N. Christensen, V. Kalogera, R. Meyer, A. Vecchio. 2008. Parameter Estimation of Spinning Binary Inspirals Using Markov-Chain Monte Carlo. *Class. Quant. Grav.* 25, 184011. arXiv:0805.1689

- J. R. Gair, I. Mandel, L. Wen. 2008. Improved Time-Frequency Analysis of Extreme-Mass-Ratio Inspiral Signals in Mock LISA Data. *Class. Quant. Grav.* 25, 184031. arXiv:0804.1084

- S. Babak et al. (Mock LISA Data Challenge Team). 2008. Report on the Second Mock LISA Data Challenge. *Class. Quant. Grav.* 25, 114037. arXiv:0711.2667

J. R. Gair, I. Mandel, L. Wen. 2008. Time-Frequency Analysis of Extreme-Mass-Ratio Inspiral Signals in Mock LISA Data. *J. Phys.: Conf. Ser.* 122 012037. arXiv:0710.5250

- J. R. Gair, C. Li, I. Mandel. 2008. Observable Properties of Orbits in Exact Bumpy Spacetimes. *Phys. Rev. D* 77 024035. arXiv:0708.0628

I. Mandel. 2007. Spin Distribution Following Minor Mergers and the Effect of Spin on the Detection Range for Low-Mass-Ratio Inspirals. arXiv:0707.0711

- I. Mandel, D. A. Brown, J. R. Gair, M. C. Miller. 2008. Rates and Characteristics of Intermediate-Mass-Ratio Inspirals Detectable by Advanced LIGO. *ApJ* 681 1431-1447. arXiv:0705.0285

- D. A. Brown, J. Crowder, C. Cutler, I. Mandel, M. Vallisneri. 2007. A Three-Stage Search for Supermassive Black Hole Binaries in LISA data. *Class. Quant. Grav.* 24, S595-S605. arXiv:0704.2447

- P. Amaro-Seoane, J. R. Gair, M. Freitag, M. C. Miller, I. Mandel, C. Cutler, S. Babak. 2007. Intermediate and Extreme Mass-Ratio Inspirals – Astrophysics, Science Applications and Detection using LISA. *Class. Quant. Grav.* 24 R113-R170. arXiv:astro-ph/0703495

- K. Arnaud et al. (Mock LISA Data Challenge Team). 2007. Report on the First Round of the Mock LISA Data Challenges. *Class. Quant. Grav.* 24, S529-S539. arXiv:gr-qc/0701139

- D. A. Brown, J. Brink, H. Fang, J. R. Gair, C. Li, G. Lovelace, I. Mandel, K. S. Thorne. 2007. Gravitational Waves from Intermediate-Mass-Ratio Inspirals for Ground-based Detectors. *Phys. Rev. Lett.* 99, 201102. arXiv:gr-qc/0612060

- I. Mandel. 2005. The Geometry of a Naked Singularity Created by Standing Waves Near a Schwarzschild Horizon, and Its Application to the Binary Black Hole Problem. *Phys. Rev. D* 72 084025. arXiv:gr-qc/0505149

- A. Silbergleit, I. Mandel, I. Nemenman. 2003. Potential and Field Singularity at a Surface Point Charge. *J. Math. Phys.* 44 (10) 4460-4466. arXiv:math-ph/0306039

A. Silbergleit, I. Nemenman, I. Mandel. 2003. On the Interaction of Point Charges in an Arbitrary Domain. *J. Tech. Phys.* 48 (2), 146-151. arXiv:physics/0105052