

LARRY R. PRICE

CONTACT

California Institute of Technology
MS 100-36
Pasadena, CA 91125
Email: larry@lrp.io
Web: www.lrp.io

EDUCATION

University of Florida Gainesville, FL
Ph.D. in Physics 2007
Advisor: Bernard Whiting
Thesis: *Topics in the Perturbation Theory of Rotating Black Holes*

Reed College Portland, OR
B.A. in Physics 2001

RESEARCH EXPERIENCE

California Institute of Technology, Senior Postdoctoral Scholar 2010–Present
Senior postdoctoral researcher.

University of Wisconsin – Milwaukee, Research Associate 2007–2010
Postdoctoral researcher.

AWARDS AND FELLOWSHIPS

University of Florida Institute for Fundamental Theory Summer Fellowship 6/2007-8/2007

University of Florida Alumni Fellowship 8/2002-8/2006

APS Topical Group in Gravity Blue Apple Award 2006
In recognition of the best graduate student presentation at the Gulf Coast Relativity meeting.

CQG Annual Highlight 2006
Publication (*Metric Perturbations from Weyl Scalars*) selected as an annual highlight by the editorial board of *Classical and Quantum Gravity*.

PUBLICATIONS

A Practical Application of the Optimal Statistic for Stochastic Gravitational Wave Background Searches in Pulsar Timing Data, Sydney J. Chamberlin, Jolien D. E. Creighton, Justin Ellis, Xavier Siemens, Paul Demorest, *Larry R. Price* and Joseph D. Romano, arXiv:1410.8256 (Submitted to Phys. Rev. D) (2014)

The First Two Years of Electromagnetic Follow-up with Advanced LIGO and Virgo, Leo P. Singer, *Larry R. Price*, Ben Farr, Alex L. Urban, Chris Pankow, Salvatore Vitale, John Veitch, Will M. Farr, Chad Hanna, Kipp Cannon, Tom Downes, Philip Graff, Carl-Johan Haster, Ilya Mandel, Trevor Sidery, and Alberto Vecchio, *ApJ* **795**, 105 (2014)

Reconstructing the Sky Location of Gravitational-Wave Detected Compact Binary Systems: Methodology for Testing and Comparison, T. Sidery, B. Ayloott, N. Christensen, B. Farr, W. Farr, F. Feroz, J. Gair, K. Grover, P. Graff, C. Hanna, V. Kalogera, I. Mandel, R. OShaughnessy, M. Pitkin, *L. R. Price*, V. Raymond, C. Röver, L. Singer, M. van der Sluys, R.J.E. Smith, A. Vecchio, J. Veitch, S. Vitale, *Phys. Rev. D* **89**, 84060 (2014)

Optimizing Optical Follow-Up of Gravitational-Wave Candidates, Leo Singer, *Larry R. Price* and Antony Speranza, arXiv:1204.4510 (2012)

Detecting Transient Gravitational-Waves in Non-Gaussian Noise with Partially Redundant Analysis Methods, Rahul Biswas, Patrick R. Brady, Jordi Burguet-Castell, Kipp Cannon, Jessica Clayton, Alexander Dietz, Nickolas Fotopoulos, Lisa M. Goggin, Drew Keppel, Chris Pankow, *Larry R. Price*, Ruslan Vaulin, *Phys. Rev. D* **85**, 122009 (2012)

Likelihood Ratio Ranking of Gravitational-Wave Candidates in a Non-Gaussian Background, Rahul Biswas, Patrick R. Brady, Jordi Burguet-Castell, Kipp Cannon, Jessica Clayton, Alexander Dietz, Nickolas Fotopoulos, Lisa M. Goggin, Drew Keppel, Chris Pankow, *Larry R. Price*, Ruslan Vaulin, *Phys. Rev. D* **85**, 122008 (2012)

Gravitational Waves from Global Second Order Phase Transitions, John Giblin, *Larry R. Price*, Xavier Siemens, and Brian Vlcek, arXiv:1111.4014 (2011)

Gravitational Radiation from Preheating with Many Fields, John Giblin, *Larry R. Price* and Xavier Siemens, *JCAP* 1008:012 (2010)

Conservative, gravitational self-force for a particle in circular orbit around a Schwarzschild black hole in a Radiation Gauge, Tobias Keidl, Abhay Shah, John Friedman, Dong-Hoon Kim and *Larry R. Price*, *Phys. Rev. D* **83**, 064018 (2011)

Gravitational Self-force in a Radiation Gauge, Tobias Keidl, Abhay Shah, John Friedman, Dong-Hoon Kim and *Larry R. Price*, *Phys. Rev. D* **82**, 124012 (2010)

Optimal Strategies for Gravitational Wave Stochastic Background Searches in Pulsar Timing Data, Melissa Anholm, Stefan Ballmer, Jolien Creighton, *Larry R. Price* and Xavier Siemens, *Phys. Rev. D* **79**, 084030 (2009)

Stochastic Backgrounds of Gravitational Waves from Cosmological Sources, *Larry R. Price* and Xavier Siemens, *Phys. Rev. D* **79**, 063541 (2008)

On the Existence of Radiation Gauges in Petrov Type II Spacetimes, *Larry R. Price*, Karthik Shankar and Bernard F. Whiting, *Class. Quantum Grav.* **24**, 2367 (2007)

Metric Perturbations from Weyl Scalars, Bernard F. Whiting and *Larry R. Price*, *Class. Quantum Grav.* **22**, S589 (2005)

SELECT LIGO–VIRGO PUBLICATIONS

First Searches for Optical Counterparts to Gravitational-wave Candidate Events, ariv:arXiv:1310.2314 (2013)

Swift follow-up observations of candidate gravitational-wave transient events, ApJS **203**, 28 (2012)

First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic counterparts, A&A **541**, A155 (2012)

Implementation and testing of the first prompt search for electromagnetic counterparts to gravitational wave transients, A&A **539**, A124 (2012)

IN PREPARATION

Towards a Measurement of the Space-Time Dissipation, Huan Yang, *Larry R. Price*, Nicolas D. Smith-Lefebvre, Haixing Miao, Yanbei Chen and Rana X. Adhikari

WHOOMP! (There it is): Rapid Bayesian Position Reconstruction for Gravitational-Wave Transients, Leo P. Singer and *Larry R. Price*

PLENARY TALKS

8th Capra Ranch Meeting on Radiation Reaction

Pasadena, CA, June 2014

aLIGO: Status, Plans & Prospects

2010 International School on Numerical Relativity and Gravitational Waves

Pohang, South Korea, July 2010

Introduction to Gravitational Wave Data Analysis, Three hours of lectures on gravitational wave data analysis.

8th Edoardo Amaldi Conference

New York City, NY, June 2009

Detecting Gravitational Waves with Interferometry and Pulsar Timing

13th Gravitational Wave Data Analysis Workshop

San Juan, PR, January 2009

Searching for Stochastic Backgrounds With Interferometry and Pulsar Timing

INVITED TALKS

SACNAS National Conference

Los Angeles, CA, October 2014

Multi-Messenger Astronomy with Gravitational Waves

Perimeter Institute for Theoretical Physics Seminar

Waterloo, ON, April 2011

Putting the Astronomy in Gravitational Wave Astronomy

MIT LIGO Seminar

Cambridge, MA, March 2010

Bridging the Gap Between EM and GW Astronomy

Montana State Physics Colloquium and Physics Seminar

Bozeman, MT, February 2010

Putting the Astronomy in Gravitational Wave Astronomy

Montana State Physics Seminar

Bozeman, MT, February 2010

Gravitational Waves from Cosmological Sources

Caltech LIGO Seminar

Pasadena, CA, February 2010

Putting the Astronomy in Gravitational Wave Astronomy

3rd ATNF Gravitational Wave Workshop

Sydney, AU, December 2009

The Optimal Statistic for Detecting a GW Background

Cardiff University Physics Seminar

Cardiff, UK, August 2009

Gravitational Waves from Cosmological Sources

Los Alamos National Laboratory Astrophysics Seminar

Los Alamos, NM, April 2009

Stochastic Backgrounds of Gravitational Waves: Detection and Sources

Carleton College ‘What do physicists do?’ Course Guest Lecture

Northfield, MN, April 2009

The Search for Gravitational Waves

OTHER ACTIVITIES

- Co-chair of the LIGO–Virgo collaboration subgroup on electromagnetic followup of gravitational wave events.
- Mentor to eight undergraduates as part of Caltech’s Summer Undergraduate Research Fellowship program.
- Member of the LIGO Scientific Collaboration.
- Co-mentor to Caltech and UWM graduate students on projects in gravitational wave position reconstruction, detecting gravitational waves with pulsar timing experiments, gravitational self-force, and cosmological sources of gravitational waves.
- Founding participant of UWM’s Arecibo Remote Command Center outreach project. Mentor to numerous undergraduates and high school students in research related to radio astronomy.
- Reviewer for scientific journals.