

Marina Wahl | Curriculum Vitae

✉ marina.wahl@gmail.com • 📄 dev.mariwahl.us • 🌐 github.com/mariwahl

Education

Los Alamos National Laboratory, NM and Stony Brook University, NY, USA <i>Ph.D., Computational Physics</i>	(expected) 2014
Hacker School, New York, NY, USA <i>hackerschool.com</i>	2014
Stony Brook University, NY, USA <i>M.A., Physics</i>	2011
University of Sao Paulo, Brazil <i>Bc.S., Physics</i>	2008

Research Experience and Collaboration

Los Alamos, NM, USA <i>Los Alamos National Laboratory</i> qso.lanl.gov	Graduate Fellowship 2014-
Brookhaven National Laboratory, USA <i>New York Blue</i> bnl.gov/newyorkblue	Fellow 2012-2014
Upton, NY, USA <i>Brookhaven National Laboratory</i> bnl.gov	PHENIX Collaboration 2010-2012
Greenbelt, MD, USA <i>NASA's Goddard Space Flight Center</i> nasa.gov/centers/goddard/home	Graduate Fellowship 2008

Honors and Awards

2014-: Graduate Fellowship, Los Alamos National Laboratory, USA.
2014: Scholarship, Hacker School, USA.
2009-2014: Full Ph.D Tuition, Stony Brook University, USA.
2010-2014: Researcher Assistant, Stony Brook University, USA.
2013: Full Cost of Attendance, International Summer School on HPC in Sciences, USA.
2009-2010: Teaching Assistant, Stony Brook University.
2008: Full Cost of Attendance, 5th CERN School of High-Energy Physics, Colombia.
2008: Travel Grant for Women in Physics, American Physical Society, USA.
2008: Full Cost of Attendance, 6th Simons Workshop in Mathematics and Physics, USA.
2008: Full Cost of Attendance, 5th International School on Field Theory and Gravitation, Brazil.
2008: Full Cost of Attendance, 7th Workshop on New Physics from Space, Brazil.
2004-2007: REU fellowship, National Council for Scientific and Technological Development, Brazil.
2004-2005: Biannual Honor Scholarship, Engineering Alumni Association, University of Sao Paulo, Brazil.
High School: Best Project in Computer Science, 17th International Science Meeting for High School, Brazil.

Conferences and Meetings

2013: International Summer School on HPC Challenges in Sciences, USA.
2013: 221st AAS Meeting - Long Beach, CA, USA.
2012: High Performance Computing Workshop - Stony Brook, NY, USA.
2012: sPHENIX Workfest - Knoxville, TE, USA.
2011: sPHENIX Workfest - Boulder, CO, USA.
2011: Simons Workshop in Topological Quantum Computing - Stony Brook, NY.
2011: Geometric and Algebraic Structures in Mathematics - Stony Brook, NY.
2010: Simons Conference on New Trends in Quantum Computation - Stony Brook.
2010: Brookhaven Forum 2010, A Space-Time Odyssey - Brookhaven National Laboratory, NY.
2010: 8th Simons Workshop in Mathematics and Physics - Stony Brook, NY.
2009: 7th Simons Workshop in Mathematics and Physics - Stony Brook, NY.
2009: 5th International School on Field Theory and Gravitation - Cuiaba, Brazil.
2009: 5th CERN School of High-Energy Physics - Medellin, Colombia.
2008: 6th Simons Workshop in Mathematics and Physics - Stony Brook, NY.
2008: 7th Workshop on New Physics from Space - Sao Paulo, Brazil.
2004: Summer School in Astrophysics, Institute of Astronomy, University of Sao Paulo, Brazil.
2004: Winter School on Theoretical Physics, Institute of Theoretical Physics - Sao Paulo, Brazil.

Publications

2014: On Classifying Complex Networks by their Topological Properties (in review).
2014: Sub-Eddington Model Atmospheres, Spectra, and Color Corrections for X-Ray Bursting Neutron Stars (in review).
2013: e-Book: Algorithms and Python.
2012: Jet-Underlying Event Separation Method for Heavy Ion Collisions at the Relativistic Heavy Ion Collider, Phys. Rev. C 86, 024908 (2012).
2011: e-Book: Group Theory for Physicists

Relevant Classes

Graduate, Computer Science:: Machine Learning, Computer Security, Introduction to Robotics, Computational Photography, Numerical Methods.

Graduate, Physics:: Quantum Mechanics, Electromagnetism, Classical Mechanics, Statistical Mechanics, Group Theory, String Theory, Quantum Field Theory, Data Analysis in Astronomy, Quantum Information, Topological Quantum Field Theory, Nuclear Physics, Particle Physics.

MOOC, Computer Science:: Coursera's Startup Engineering, Coursera's Machine Learning

Computer Skills

Strengths:: PYTHON and NUMPY/SCI-PY/SCIKIT-LEARN/NETWORKX/MATPLOTLIB, LINUX, Algorithms, Machine Learning.

Experience:: JAVA, JAVASCRIPT/HTML/CSS/ JQUERY/NODE.JS/EXPRESS, C/C++, MATLAB, IDL, SQL and NOSQL databases, PARALLEL COMPUTING and OPENMP/MPI, PHOTOSHOP/GIMP, FINAL CUT/ADOBE AFTER EFFECTS, ANDROID, MICROSOFT KINECT SDK, LATEX, ARDUINO BOARDS.

Mentoring and Teaching

2014: Mentor, CoderDojo Long Island (teaching 10-17 years-old kids to code in Python).
2009-2010: Teaching Assistant, Stony Brook University (laboratory of Physics for undergraduates).