

# Christina Krawiec, Ph.D.

5+ years experience analyzing large data sets with Python, C++, and SQL

492 Grant Ave  
Willow Grove, PA 19090

Website: [ckrawiec.github.io](http://ckrawiec.github.io)  
Email: [christina.i.krawiec@gmail.com](mailto:christina.i.krawiec@gmail.com)  
Phone: +1 (856) 362-1264

## Education

University of Pennsylvania	Ph.D, Physics, October 2018.
Rutgers, The State University of New Jersey	B.S., Astrophysics, <i>summa cum laude</i> , 2013. History Minor

## Experience

scienceSeeds	<i>Science Educator</i> , Oct. 2018 - July 2019. Curriculum development and after-school class instruction in addition to managing products, website, and social media.
Dept of Physics & Astronomy, University of Pennsylvania	<i>Ph.D. Research</i> , 2013-2018. Advised by Gary Bernstein. Measuring gravitational lensing magnification of high redshift objects in DES; Tested shear measurement codes.
Dept of Physics & Astronomy, Rutgers University	<i>Honors Thesis</i> , 2012-2013. Advised by Chuck Keeton. Analysed gamma-ray burst energy spectra to assess the feasibility of measuring primordial black hole lensing. <i>Research Assistant</i> , Summer 2011. Modeled gravitational lensing of planetesimals. <i>Aresty Summer Program</i> , Summer 2010. Modeled lensing magnification effects of clumpy dark matter.
Dept of Astrophysics, American Museum of Natural History	<i>Research Experience for Undergraduates</i> , Summer 2012. Advised by Sebastien Lepine. Selected white dwarf candidates for brown or red dwarf companions.

## Outreach

Philadelphia Mini Maker Faire	<i>Communications Volunteer</i> , May-June, 2018.
STEMCityPHL	<i>Tech Camp Mentor</i> , 2018. Helped local high school students with coding and web design.
The Franklin Institute	<i>Discovery Camp Visiting Scientist</i> , Summers 2015-Present. Presenting science to K-12 students by designing and leading activities every Friday morning.
Penn Education & Public Outreach in Physics & Astronomy (PEPOPA)	<i>Social Media Manager</i> , 2015-Present. <i>Science After Hours Liaison</i> , 2017. Organized demonstrations, materials, and volunteers for Penn Physics at the Franklin Institute's monthly age 21+ events.
Rutgers University	<i>Peer Advisor</i> , <i>Aresty Research Program</i> , 2012-2013. <i>Volunteer Tutor</i> , <i>SAS Honors Program</i> , 2010-2012. Coached peers on physics and calculus.

## Publications

- Astronomers' and Physicists' Attitudes Towards Education & Public Outreach: A Case Study with The Dark Energy Survey.** A. Farahi, R. R. Gupta, **C. Krawiec**, A. A. Plazas, R. C. Wolf, 2018, JSO Vol. 2, 1-15
- An Accurate and Practical Method for Inference of Weak Gravitational Lensing from Galaxy Images.** Gary M. Bernstein, Robert Armstrong, **Christina Krawiec**, and Marisa C. March, 2016 MNRAS 459, 4467-4484

## Technical Skills

Python, C/C++, SQL, Java, JavaScript, HTML/CSS, Adobe Creative Suite, Google Apps, Microsoft Office Suite, OpenOffice, IDL, L<sup>A</sup>T<sub>E</sub>X, GIMP, Pixelmator, iMovie