

## Curriculum Vitae

### Research Interests:

Accretion phenomena; black holes; GRMHD simulations.

### Publications:

*An Extension of the Athena++ Code Framework for GRMHD Based on Advanced Riemann Solvers and Staggered-Mesh Constrained Transport*

C. J. White, J. M. Stone, C. F. Gammie. 2016. ApJS 225(2) 22.  
DOI: 10.3847/0067-0049/225/2/22, ADS: 2016ApJS..225...22W, arXiv: 1511.00943

*Stability of metal-rich very massive stars*

J. Goodman, C. J. White. 2016. MNRAS 456 525.  
DOI: 10.1093/mnras/stv2694, ADS: 2014arXiv1403.7241G, arXiv: 1403.7241

*Slow-speed Supernovae from the Palomar Transient Factory: Two Channels*

C. J. White, M. M. Kasliwal, et al. 2015. ApJ 799 52.  
DOI: 10.1088/0004-637X/799/1/52, ADS: 2015ApJ...799...52W, arXiv: 1405.7409

### Presentations:

*GRMHD with Athena++ and its Application to MAD*

C. J. White, J. M. Stone. Poster presented at 2016 Simulations and Modelling of Relativistic Accretion Discs conference, Oxford.

*Athena++: A New GRMHD Code for Black Hole Accretion*

C. J. White, J. M. Stone. Poster presented at 2015 Black Hole Accretion and AGN Feedback conference, Shanghai.

*Nonadiabatic Pulsation Analysis of Supermassive Stars*

C. J. White, J. Goodman. Talk presented at 2014 AAS Meeting 223, 434.04. ADS: 2014AAS...22343404W

*A Peculiar Class of Slow Speed Supernovae from the Palomar Transient Factory*

C. J. White, M. M. Kasliwal. Poster presented at 2013 AAS Meeting 222, 317.09.

**Education:**

*Princeton University*

Degrees: Doctor of Philosophy (2016) and Master of Science (2013)  
Subject: Astrophysics

*California Institute of Technology*

Degrees: Bachelor of Science (2011)  
Majors: Physics and Mathematics  
Minor: Philosophy  
Graduated with honors

**Teaching Experience:**

*Teaching Assistant at Princeton* 2012

“Planets in the Universe” course for non-scientists. In addition to regular teaching duties, involved instructing students in hands-on observing sessions.

*Teaching Assistant at Caltech* 2010–2011

Sophomore physics laboratory (4 terms). Oversaw experiments and also held individual recitations with each student.

**Outreach:**

*Prison Teaching Initiative* 2011–2015

Worked with a group of faculty, researchers, and students at Princeton to give inmates in state prisons another chance at education. Working on an entirely volunteer basis, we went into prisons to hold classes and we also graded work and perform other such necessary tasks high school and college courses require to function.

*Public Observing* 2011–2016

Helped run regularly scheduled public observing sessions using the department’s telescope, aimed at both the university and the broader community.

**Technical Skills:**

*Languages*

C++, C, Python, Bash, IDL, Matlab, IRAF

*Visualization and analysis*

Python, VisIt

*Tools*

Git, GDB, DDT, VTune, Gprof, Valgrind. Extensive experience optimizing code for performance.