

MAXWELL POLLACK

mail @ maxis.cool

BS Physics, 2015
The College of NJ

MS Astronomy, 2017
UWisconsin-Madison

code, art, and music at
maxis.cool

JOBS

Recurser, The Recurse Center. Jul-Sep 2019

Self-directed, community-driven educational retreat for programmers.

Research Intern, Numenta. Dec 2018-Apr 2019

Machine learning + theoretical neuroscience. Supervised by Subutai Ahmad.

Graduate Research Assistant, The University of Wisconsin-Madison. Jun 2015-Aug 2017

Observational + computational study of binary stars. Advised by Bob Mathieu.

Undergraduate Research Assistant, The College of New Jersey. Sep 2013-Dec 2014

Computational fluid dynamics, galactic jets. Advised by Paul Wiita.

PAPERS

"WIYN Open Cluster Study: The Hard Binary Population of M67"

Geller, Pollack, Mathieu, Latham 2019. in prep

"A Curiously Young Star in an Eclipsing Binary in an Old Open Cluster"

Sandquist, Mathieu, Quinn, Pollack, et al. 2018. The Astronomical Journal, 155, 152S

"Variability in Active Galactic Nuclei from Propagating Relativistic Turbulent Jets"

Pollack, Pauls, Wiita 2016. The Astrophysical Journal, 820, 12P

MEETINGS

Binary Stars in Cambridge 2016, Cambridge, UK.

Poster entitled "Modeling Blue Straggler Formation Through Case C Mass Transfer with MESA" Pollack, Leiner, Mathieu 2016.

MESA Summer School 2015, Santa Barbara, CA.

10-day workshop at USCB using the stellar evolution code MESA.

American Physical Society Division of Fluid Dynamics 2014, San Francisco, CA.

Poster entitled "Flux Variability from Turbulence and Bulk Velocity Variations in Relativistic Hydrodynamic Jets" Pollack, Pauls, Wiita 2014.

TEACHING

Lecturer, Rose Memorial Library, Stony Point, NY. Aug 21, 2017

30-min public astronomy talk for the 2017 Solar Eclipse.

Telescope Operator, Washburn Observatory, Madison, WI. Jun 2015-Jun 2017

Quarterly public observing nights, weather permitting.

Student, "Teaching in Science and Engineering, The College Classroom". Spring 2017

1 semester for-credit course about higher-ed STEM teaching methodology.

Graduate Teaching Assistant, The University of Wisconsin-Madison. Fall 2016

6 recitation sections of Astronomy 103 "The Evolving Universe".

Telescope Operator, TCNJ Observatory, Ewing, NJ. Fall 2013-Spring 2015

Weekly public observing nights, weather permitting.

CODE

"Spatial Localization with simple recurrent networks" Python, PyTorch

github.com/maxwellpollack/localization_rnn

"Repitch: a real-time, polyphonic, MIDI-controlled audio pitch shifter" C++, JUCE

github.com/maxwellpollack/repitch