

MAXWELL POLLACK

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BS

Physics, 2015
The College of NJ

MS

Astronomy, 2017
UWisconsin-Madison

Recurser, The Recurse Center. July – September 2019
Self-directed, community-driven educational retreat for programmers.

CODE: "Repitch: a real-time, MIDI-polyphonic audio pitch shifter"
C++, JUCE. github.com/maxwellpollack/repitch

Research Intern, Numenta. December 2018 – April 2019
Theoretical neuroscience and machine learning research.

CODE: "Localization in simulated 1D + 2D environments with simple recurrent networks"
Python, PyTorch. github.com/maxwellpollack/localization_rnn

Graduate Research Assistant, The University of Wisconsin-Madison. June 2015 – August 2017
Spectroscopic observations and computational modeling of binary stars.

PAPER: "WIYN Open Cluster Study: The Hard Binary Population of M67"
Geller, Pollack, Mathieu, Latham 2019. In prep.

PAPER: "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.

CLASS: "Teaching in Science and Engineering, The College Classroom". Spring 2017
1 semester for-credit course on higher-ed STEM teaching methods.

TEACHING: Astronomy 103 "The Evolving Universe", Fall 2016
6 weekly recitation sections.

POSTER: "Modeling Blue Straggler Formation Through Case C Mass Transfer with MESA"
Pollack, Leiner, Mathieu 2016. Binary Stars in Cambridge 2016, Cambridge, UK.

WORKSHOP: MESA Summer School 2015, Santa Barbara, CA.
10-day workshop at UCSB using the stellar evolution code MESA.

OUTREACH: Telescope Operator, Washburn Observatory, Madison, WI. June 2015 – June 2017
Quarterly observing nights (weather permitting), open to the public.

MUSE Summer Researcher, The College of New Jersey. June 2014 – July 2014
Relativistic hydrodynamic simulations of galactic jets and their synchrotron emission.

PAPER: "Variability in Active Galactic Nuclei from Propagating Relativistic Turbulent Jets"
Pollack, Pauls, Wiita 2016. The Astrophysical Journal, 820, 12P.

POSTER: "Flux Variability from Turbulence and Bulk Velocity Variations in Relativistic Hydrodynamic Jets"
Pollack, Pauls, Wiita 2014. American Physical Society Division of Fluid Dynamics 2014, San Francisco, CA.

OUTREACH: Telescope Operator, TCNJ Observatory, Ewing, NJ. Fall 2013 – Spring 2015
Weekly observing nights (weather permitting), open to the public.