Maura Ann McLaughlin

Professional preparation

Penn State University, University Park, PA	Astronomy and Astrophysics	B.S. 1994
Cornell University, Ithaca, NY	Astronomy and Space Sciences	M.S. 1997, Ph.D. 2001

Appointments

5/2015–present	**Eberly Family Distinguished Professor**, Dept. of Physics and Astronomy, West Virginia University (WVU), Morgantown, WV
5/2014–5/2015	**Professor**, Dept. of Physics and Astronomy, WVU
8/2011–5/2014	**Associate Professor**, Dept. of Physics and Astronomy
9/2009–9/2013	**Research Corporation Cottrell Scholar**
9/2008–9/2010	**Alfred P. Sloan Research Fellow**
5/2006–present	**Adjunct Staff Scientist**, Green Bank Observatory, Green Bank, WV
5/2006–8/2011	**Assistant Professor**, Dept. of Physics and Astronomy, WVU
10/2003–5/2006	**Research Associate**, Jodrell Bank Observatory, University of Manchester, UK
9/2001–9/2003	**NSF Math and Physical Sciences Distinguished Research Fellow**
1994–9/2001	**Graduate Research Assistant**, Dept. of Astronomy, Cornell University, Ithaca, NY
1992–1994	**Undergraduate Research Assistant**, Dept. of Astronomy and Astrophysics, Penn State University, University Park, PA

Most Significant Publications[1]

[1] Alam, et al. for the NANOGrav Collaboration, 2021, *The NANOGrav 12.5 yr Data Set: Wideband Timing of 47 Millisecond Pulsars*, ApJS, 252, 1.

[2] Arzoumanian et al. for the NANOGrav Collaboration, 2020, *The NANOGrav 12.5 yr Data Set: Search for an Isotropic Stochastic Gravitational-wave*, ApJL, 905, 2.

[3] Alam, et al. for the NANOGrav Collaboration, 2020, *Multimessenger Gravitational-wave Searches with Pulsar Timing Arrays: Application to 3C 66B Using the NANOGrav 11-year Data Set*, ApJ, 900, 2.

[4] Blumer*, H., McLaughlin, M. A., Stewart, J., Williamson, K., Lorimer, D. R., Heatherly, S. A., Swiggum, J. K., Lynch, R. S., Zabriskie, C., Lewandowska*, N., Roy, A., and Au, S., 2020, *The pulsar search collaboratory: Current status and future prospects*, AmJPh, 88, 1.

[5] Williamson, K., McLaughlin, M. A., Stewart, J., Lorimer, D. R., Blumer*, H., Zabriskie, C., Heatherly, S. A., & Lynch, R. S., 2019, *The Pulsar Search Collaboratory: Expanding Nationwide*, PhTea, 57, 3.

[6] Gentile*, P. A., McLaughlin, M. A., Demorest, P. B., Stairs, I. H., Arzoumanian, Z., Crowter, K., Dolch, T., DeCesar, M. E., Ellis, J. A., Ferdman, R. D., Ferrara, E. C., Fonseca, E., Gonzalez,

[1]Names with a "*" are students, high-school teachers, or postdoctoral research associates working under my supervision. The first author and collaboration name are listed for papers with alphabetical author-lists.

M. E., Jones, G., Jones*, M. L., Lam*, M. T., Levin, L., Lorimer, D. R., Lynch, R. S., Ng, C., Nice, D. J., Pennucci, T. T., Ransom, S. M., Ray, P. S., Spiewak, R., Stovall, K., Swiggum, J. K. & Zhu, W., 2018, *The NANOGrav 11 yr Data Set: Arecibo Observatory Polarimetry and Pulse Microcomponents*, ApJ, 862, 47.

[7] Lam*, M. T., McLaughlin, M. A., Cordes, J. M., Chatterjee, S., & Lazio, T. J. W., 2018, *Optimal Frequency Ranges for Submicrosecond Precision Pulsar Timing*, ApJ, 861, 12.

[8] Jones*, M. L., McLaughlin, M. A., Lam*, M. T., Cordes, J. M., Levin*, L., Chatterjee, S., Arzoumanian, Z., Crowter, K., Demorest, P. B., Dolch, T., Ellis, J. A., Ferdman, R. D., Fonseca, E., Gonzalez, M. E., Jones, G., Lazio, T. J. W., Nice, D. J., Pennucci, T. T., Ransom, S. M., Stinebring, D. R., Stairs, I. H., Stovall, K., Swiggum, J. K., & Zhu, W. W. 2017, *The NANOGrav Nine-year Data Set: Measurement and Analysis of Variations in Dispersion Measures*, ApJ, 841, 125.

[9] Levin*, L., McLaughlin, M. A., Jones, G., Cordes, J. M., Stinebring, D. R., Chatterjee, S., Dolch, T., Lam, M. T., Lazio, T. J. W., Palliyaguru*, N., Arzoumanian, Z., Crowter, K., Demorest, P. B., Ellis, J. A., Ferdman, R. D., Fonseca, E., Gonzalez, M. E., Jones*, M. L., Nice, D. J., Pennucci, T. T., Ransom, S. M., Stairs, I. H., Stovall, K., Swiggum, J. K., & Zhu, W., 2015, *The NANOGrav Nine-year Data Set: Monitoring Interstellar Scattering Delays*, ApJ, 818, 166.

[10] Swiggum*, J. K., Rosen*, R., McLaughlin, M. A., Lorimer, D. R., Heatherly, S., Lynch, R., Scoles, S., Hockett*, T., Filik*, E., Marlowe*, J. A., Barlow*, B. N., Weaver*, M., Hilzendeger*, M., Ernst*, S., Crowley*, R., Stone*, E., Miller*, B., Nunez*, R., Trevino*, G., Doehler*, M., Cramer*, A., Yencsik*, D., Thorley*, J., Andrews*, R., Laws*, A., Wenger*, K., Teter*, L., Snyder*, T., Dittmann*, A., Gray*, S., Carter*, M., McGough*, C., Dydiw*, S., Pruett*, C., Fink*, J., & Vanderhout*, A., 2014, *PSR J1930-1852: a Pulsar in the Widest Known Orbit around Another Neutron Star*, ApJ, 805, 2.

Awards

2020 SURA Distinguished Scientist Award
2019 Named one of Nature Magazine's "One to Watch"
2019 Penn State University Honors College Outstanding Alumni Mentoring Award
2016 WVU Presidential Award for Excellence in Collaborative Research
2015 Benedum Distinguished Scholar Award
2014 Eberly Distinguished Professorship Recipient
2011 Harley Kilgore Award for Promoting Public Understanding of Science and Research
2010 Eberly College of Arts & Sciences Outstanding Researcher Award

Leadership and outreach activities

2020–present WVU APS Bridge Partnership Program Coordinator
2015–present Director of the WVU Center for Gravitational Waves and Cosmology
2015–present Co-Director of the NANOGrav Physics Frontiers Center
2010–present NANOGrav Research Abroad Program Coordinator
2008–present Co-Director of the Pulsar Search Collaboratory (PSC) program
2018–2020 Member of the Defense Science Study Group
2016–2017 Organizer of 'A Shout Across Time' Symphony for Celebrating Einstein week at WVU
2014–2018 Producer of the documentary 'little green men' about the PSC program