

Pauline Barmby

June 2017

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Education

PhD, Astronomy	Harvard University	2001
AM, Astronomy	Harvard University	1998
B.Sc.(Hons), Physics & Astronomy	University of British Columbia	1995

Positions Held

Acting Dean	Faculty of Science, Western University	2017–2018
Associate Dean, Graduate & Postdoctoral Studies	Faculty of Science, Western University	2015–present
Associate Professor	Department of Physics & Astronomy, Western University	2013–present
Assistant Professor	Department of Physics & Astronomy, Western University	2007–2013
Astrophysicist	Smithsonian Astrophysical Observatory	2001–2007

Research Interests

Observational extragalactic astronomy: galaxy formation, stellar populations, extragalactic star clusters, clusters of galaxies, active galactic nuclei

Astroinformatics: data processing and knowledge discovery in astrophysical data

Research Grants, 2011–2017

Assembling the Big Picture of Nearby Galaxies	\$135k	NSERC Discovery Grant	2013–2018
Far Out: Tracing the Mass in M31	\$16k	Spitzer Science Center	2012
Astroinformatics	\$84k	Western University ADF	2012–2014
Star Formation Histories of Nearby Galaxies	\$125k	NSERC Discovery Grant	2008–2013
Star Formation Histories of Nearby Galaxies	\$140k	Ontario Early Researcher Award	2008–2013

Professional Activities, 2011–2017

Co-chair	Astronomy mini-symposium, SciPy conference	2017
Member	Dunlap Institute advisory board	2016–present
Chair	Software/Data Carpentry policy committee	2016–present
Member	ACURA-CASCA TMT Alternative Site Committee	2016
Director-at-large	Canadian Astronomical Society (CASCA)	2013–15
Member	CASCA Long Range Plan Implementation Committee	2014–15
Member	scientific organizing committee (SOC), “Python in Astronomy”	2014–15
Member	Canada-France-Hawaii Telescope Science Advisory Council	2014–15
Member	Users’ Committee, Gemini Observatory	2013–15
Chair	CASCA Ground-based Astronomy Committee	2013–15
Member	CASCA Ground-based Astronomy Committee	2012–13
Chair	SOC, Gemini Science Conference	2012
Member	Canadian Gemini Science Committee	2011–13

Publications

Author names in italics are Western University trainees. DOIs are linked to papers.

Selected publications, 2011–2017

1. **Kiar, A.K.**, Barmby, P., and **Hidalgo, A.**, 2017, “Deconstructing a galaxy: colour distributions of point sources in Messier 83”. MNRAS, submitted.
2. **Vulic, N.**, Barmby, P., and Gallagher, S. C., 2017, “Milky Way Globular Cluster Metallicity and Low-Mass X-ray Binaries: The Red Giant Influence”. MNRAS, submitted.
3. **Lianou, S.**, Xilouris, E., Madden, S. C., and Barmby, P., 2016, “The dustier early-type galaxies deviate from late-type galaxies’ scaling relations”. MNRAS 461, 2856–2866. DOI: [10.1093/mnras/stw1467](https://doi.org/10.1093/mnras/stw1467).
4. **Raffei Ravandi, M.**, Barmby, P., Ashby, M. L., Laine, S., Davidge, T. J., Zhang, J., Bianchi, L., Babul, A., and Chapman, S. C., 2016, “The extended disc and halo of the Andromeda galaxy observed with Spitzer-IRAC”. MNRAS 459, 1403–1414. DOI: [10.1093/mnras/stw652](https://doi.org/10.1093/mnras/stw652).
5. **Rahmani, S.**, **Lianou, S.**, and Barmby, P., 2016, “Star formation laws in the Andromeda galaxy: gas, stars, metals and the surface density of star formation”. MNRAS 456, 4128–4144. DOI: [10.1093/mnras/stv2951](https://doi.org/10.1093/mnras/stv2951).
6. **Vulic, N.**, Gallagher, S. C., and Barmby, P., 2016, “X-rays beware: the deepest Chandra catalogue of point sources in M31”. MNRAS 461, 3443–3456. DOI: [10.1093/mnras/stw1523](https://doi.org/10.1093/mnras/stw1523).
7. Boyer, M. L., McQuinn, K. B., Barmby, P., Bonanos, A. Z., Gehrz, R. D., Gordon, K. D., Groenewegen, M. A., Lagadec, E., Lennon, D., Marengo, M., McDonald, I., Meixner, M., Skillman, E., Sloan, G. C., Son-nenborn, G., van Loon, J. T., and Zijlstra, A., 2015, “An Infrared Census of Dust in Nearby Galaxies with Spitzer (DUSTiNGS). II. Discovery of Metal-poor Dusty AGB Stars”. ApJ 800, 51. DOI: [10.1088/0004-637X/800/1/51](https://doi.org/10.1088/0004-637X/800/1/51).
8. **Lianou, S.**, Barmby, P., Rémy-Ruyer, A., Madden, S., Galliano, F., and Lebouteiller, V., 2014, “Probing the interstellar medium of NGC1569 with *Herschel*”. MNRAS 445, 1003. DOI: [10.1093/mnras/stu1770](https://doi.org/10.1093/mnras/stu1770).
9. **Vulic, N.**, Gallagher, S. C., and Barmby, P., 2014, “Faint X-Ray Binaries and Their Optical Counterparts in M31”. ApJ 790, 136. DOI: [10.1088/0004-637X/790/2/136](https://doi.org/10.1088/0004-637X/790/2/136).
10. **Agar, J.R.R.** and Barmby, P., 2013, “M31 Globular Cluster Structures and the Presence of X-Ray Binaries”. AJ 146, 135. DOI: [10.1088/0004-6256/146/5/135](https://doi.org/10.1088/0004-6256/146/5/135).
11. Barmby, P. and **Jalilian, F. F.**, 2012, “Comparing Mid-infrared Globular Cluster Colors with Population Synthesis Models”. AJ 143, 87. DOI: [10.1088/0004-6256/143/4/87](https://doi.org/10.1088/0004-6256/143/4/87).
12. Sánchez-Gallego, J. R., Knapen, J. H., Wilson, C. D., Barmby, P., **Azimlu, M.**, and Courteau, S., 2012, “The JCMT Nearby Galaxies Legacy Survey - VII. H α imaging and massive star formation properties”. MNRAS 422, 3208–3248. DOI: [10.1111/j.1365-2966.2012.20845.x](https://doi.org/10.1111/j.1365-2966.2012.20845.x).
13. Ashby, M. L., Mahajan, S., Smith, H. A., Willner, S. P., Fazio, G. G., Raychaudhury, S., Zezas, A., Barmby, P., Bonfini, P., Cao, C., González-Alfonso, E., Ishihara, D., Kaneda, H., Lyttle, V., Madden, S., Papovich, C., Sturm, E., Surace, J., Wu, H., and Zhu, Y.-N., 2011, “The Star Formation Reference Survey. I. Survey Description and Basic Data”. PASP 123, 1011–1029. DOI: [10.1086/661920](https://doi.org/10.1086/661920).
14. **Azimlu, M.**, **Marciniak, R.**, and Barmby, P., 2011, “A New Catalog of H II Regions in M31”. AJ 142, 139. DOI: [10.1088/0004-6256/142/4/139](https://doi.org/10.1088/0004-6256/142/4/139).
15. Barmby, P., Marengo, M., Evans, N. R., Bono, G., Huelsman, D., Su, K. Y., Welch, D. L., and Fazio, G. G., 2011, “Galactic Cepheids with Spitzer. II. Search for Extended Infrared Emission”. AJ 141, 42. DOI: [10.1088/0004-6256/141/2/42](https://doi.org/10.1088/0004-6256/141/2/42).
16. Marengo, M., Evans, N. R., Barmby, P., Matthews, L. D., Bono, G., Welch, D. L., Romaniello, M., Huelsman, D., Su, K. Y., and Fazio, G. G., 2010, “An Infrared Nebula Associated with δ Cephei: Evidence of Mass Loss?” ApJ 725, 2392–2400. DOI: [10.1088/0004-637X/725/2/2392](https://doi.org/10.1088/0004-637X/725/2/2392).