

Martha L. Boyer

Information

Institution **Space Telescope Science Institute**
Position Support Scientist
Address 3700 San Martin Drive, Baltimore, MD 21218
Email | Phone mboyer@stsci.edu | +1 410-338-6892
Web | Twitter www.marthaboyer.net | [@marthaboyer](https://twitter.com/marthaboyer)

Education

The University of Minnesota, Minneapolis, MN USA
Dec 2008 Ph.D., Astrophysics
Thesis: Mass Loss in Metal-Poor AGB Stars
Advisers: Drs. Evan Skillman, Robert Gehrz, & Charles Woodward
Jun 2006 M.S., Astrophysics
Dec 2003 B.S., Physics and B.S., Astrophysics

Research Interests

Specialization Evolved stars, dust, nearby galaxies, resolved stellar populations, Magellanic Clouds, Local Group, M31, globular clusters, optical to mid-IR imaging, photometry, and spectroscopy

Summary My research centers on the role evolved stars play in galaxies, especially Asymptotic Giant Branch (AGB), Red Giant Branch (RGB), and Red Supergiant (RSG) stars. While our collective understanding of the final stages of stellar evolution has advanced considerably over the last decade, many questions and controversies remain. Progress requires building statistical samples of resolved stars in nearby galaxies with heretofore unexplored environmental properties. I combine *Spitzer* and *Hubble* imaging of nearby galaxies out to the edge of the Local Group to study the metallicity influence on the optical and infrared properties of these important stellar phases.

Recent Research Appointments

2016–present **Space Telescope Science Institute (STScI)**, Baltimore, MD USA
Position: Support Scientist, JWST/NIRCam

2015–2016 **University of Maryland**, College Park, MD USA
Position: Visiting Research Scientist

2012–2015 **NASA GSFC**, Greenbelt, MD USA
Position: James Webb Space Telescope Postdoctoral Fellow
Supervisor: Dr. George Sonneborn

2009–2012 **STScI**, Baltimore, MD USA
Position: Postdoctoral Researcher: Surveying the Agents of Galaxy Evolution
Supervisor: Dr. Karl Gordon

Teaching and Outreach Appointments

- Loyola University Maryland**, Baltimore, MD USA
 2010–2012 Adjunct Faculty: Introductory Astronomy Lecture
- Towson University**, Towson, MD USA
 2011 Adjunct Faculty: Introductory Astronomy Laboratory
 2009–2012 Outreach: Astronomy Instructor for *Baltimore Project Astro*
- University of Minnesota**, Minneapolis, MN USA
 2008 Lecturer: Introductory Astronomy
 2006–2008 Outreach: Astronomy Department Outreach Director
 2006 Teaching Assistant: Introductory Astronomy
 2004 Teaching Assistant: Introductory Physics for Biology Majors

Recent Observing Experience

- Optical Australian Astronomical Observatory: AAT/AAOmega
 Optical Magellan Observatory: Clay/MIKE
 Optical Hubble Space Telescope: ACS/WFC
 Near-IR Hubble Space Telescope: WFC3/IR
 Near-IR Gemini North: NIRI
 Near-IR Kitt Peak Observatory: WIYN/WHIRC
 Near-IR Mt. Graham Observatory: LBT/LUCIFER
 Infrared Spitzer Space Telescope: IRAC, IRS and MIPS
 Sub-mm Herschel Space Observatory: PACS

Science Collaborations

- DUSTINGS **PI: Boyer**, *DUST in Nearby Galaxies with Spitzer*
 STARKEY PI: Marigo, *Solving the TP-AGB STAR Conundrum: a KEY to Galaxy Evolution*
 PHAT PI: Dalcanton, *Panchromatic Hubble Andromeda Treasury*
 HTTP PI: Sabbi, *Hubble Tarantula Treasury Program*
 SPIRITS PI: Kasliwal, *SPitzer InfraRed Intensive Transients Survey*
 HERITAGE PI: Meixner, *HERschel Inventory of the Agents of Galaxy Evolution*
 SAGE PIs: Meixner, Gordon, Kemper, *Surveying the Agents of Galaxy Evolution*

Mission Collaborations

- NIRCam I am a member of STScI's JWST/NIRCam Team
 WINGS Lead co-I of a WFIRST Science Investigation Team (SIT): *WFIRST Infrared Nearby Galaxy Survey*, PI: Williams
 LVM Co-I of an SDSS-V Proposal: *The Local Volume Mapper*, an optical IFU spectroscopy survey, PI: Drory

Honors and Awards

- 2012–2015 James Webb Space Telescope Fellowship (NASA)
- 2008–2009 Dissertation Fellowship (University award)
- 2008 Aneesur Rahman Prize (Physics Department award)
- 2007–2008 Louise T. Dosdall Fellowship (University award)
- 2003 Minnesota Space Grant Consortium Scholarship (State award)
- 2001–2003 Barry M. Goldwater National Scholarship (National award)
- 2001–2002 Institute of Technology Merit Scholarship (University award)
- 1999–2001 Phillips Family Scholarship (University award)
- 1999–2003 Presidential Scholarship (University award)

Academic Service

STScI Service and Committees

- 2017–2018 STScI: Spring Symposium: The 21st Century H-R Diagram (SOC)
- 2017 STScI: Science Evaluation Committee (SEC)
- 2011 STScI: Mass Loss Return from Stars to Galaxies Workshop (SOC)
- 2010–2011 STScI: Committee for the HotSci@STScI/CoolSci@STScI talk series (SOC)

2009–Present Referee, Reviewer, Panel

- AAS Chambliss Student Poster Judge
- HST Review Panel
- NASA Grant Panel
- Chilean National Science and Technology Commission (CONICYT)
- The Swedish National Space Board (SNSB)
- Astrophysical Journal (ApJ)
- Astronomy & Astrophysics (A&A)
- Monthly Notices of the Royal Astronomical Society (MNRAS)
- Publications of the Astronomical Society of the Pacific (PASP)

Other Committees

- 2016–present Mikulski Archive for Space Telescopes Users Group, MUGS
- 2016–2018 IAU: Why Galaxies Care about AGB Stars IV (SOC)
- 2015–2016 Uppsala University: Cool Stars 19, Special Session on AGB Stars (SOC)
- 2014–2015 Observatoire de la Côte d'Azur: A Nice Workshop on AGB Stars (SOC)
- 2008 University of Minnesota: External department review, internal committee

Awarded Grants and Proposals (PI | Science PI)

- 2016 Joint Spitzer and Hubble Space Telescope, \$36k
A Search for Stellar Dust Production in Leo P, a Nearby Analog of High Redshift Galaxies
- 2015 NASA Astrophysical Data Analysis, 3 years, \$447k
Stellar Dust Production in Chemically Primitive Environments
- 2015 Hubble Space Telescope/WFC3+ACS, 20 orbits, \$120k
The Evolution of Metal-Rich Asymptotic Giant Branch Stars (PHAT follow up)
- 2015 Hubble Space Telescope/WFC3, 14 orbits, \$99k
Assessing the Impact of Metallicity on Stellar Dust Production (DUSTiNGS follow up)
- 2015 Gemini North/NIRI Fast Turn Around, 3.3 hours
AGB Star Dust Production at Extremely Low Metallicity (DUSTiNGS follow up)
- 2014 Spitzer Space Telescope/IRAC, 54 hours, \$10k
Lightcurves of the Dominant Dust Producers in Metal-poor Environments (DUSTiNGS follow up)
- 2012 NASA Astrophysical Data Analysis, 2 years, \$178k
Dust Production in the Local Group
- 2012 Hubble Space Telescope/WFC3, 1 orbit, \$33k
Towards Identifying Carbon Stars Beyond the Local Group
- 2011 Herschel Space Observatory/PACS, 11.7 hours, \$31k
Investigating the Origin of the Intercluster Medium in M15
- 2011 Spitzer Space Telescope/IRAC, 120 hours, \$81k
A Complete Census of Dusty Evolved Stars in Local Group Dwarf Galaxies (DUSTiNGS)
- 2010 Anglo-Australian Telescope/AAOmega, 3 hours
Uncovering the Nature of a New Branch of Anomalous AGB Stars in the SMC
- 2009 Large Binocular Telescope/LUCIFER, 7.5 hours
AGB Star Imaging in LG Dwarf Galaxies for Characterizing Galaxy Evolution
- 2008 Spitzer Space Telescope/IRS, 2.2 hours
Connecting the Dots: IRS 16- μ m Imaging of AGB Stars in Metal-poor LG Dwarf Galaxies

Recent Awarded Grants and Proposals (Co-I)

- 2017 Srinivasan, et al., ALMA
The nature of the enigmatic mid-infrared excess sources in the Large Magellanic Cloud
- 2017 Jones, et al., ALMA
The Cold Circumstellar Envelopes of Evolved Stars in the LMC
- 2016 Dalcanton, et al., Hubble Space Telescope/ACS+WFC3
A Legacy Imaging Survey of M33
- 2016 Sloan, et al., Spitzer Space Telescope/IRAC
Spitzer's last look at the small magellanic cloud
- 2016 McDonald, et al., ALMA
The Stellar-Interstellar Border in Globular Clusters
- 2015 Williams, et al., WFIRST Science Investigation Team
WINGS: WFIRST Infrared Nearby Galaxies Survey
- 2014–2016 Kasliwal, et al., Spitzer Space Telescope/IRAC (renewed 2×)
SPIRITS: SPitzer InfraRed Intensive Transients Survey
- 2014 Jones, et al., Spitzer Space Telescope/IRAC
Infrared Variables Stars in M32
- 2013 Groenewegen, et al., ALMA
The Life Cycle of Dust and Gas: CO Observations of AGB Stars in the LMC
- 2012 Sabbi, et al., Hubble Space Telescope/ACS+WFC3
Hubble Tarantula Treasury Project (HTTP: unraveling Tarantula's web)
- 2012 McDonald, et al., ALMA
The Outflows of Metal-poor Evolved Stars in 47 Tucanae
- 2012 Dwek, et al., NASA Astrophysical Data Analysis Program
The Origin and Evolution of Dust in the Magellanic Clouds
- 2011 Whitney, et al., Spitzer Space Telescope/IRAC
Deep GLIMPSE: Exploring the Far Side of the Galaxy
- 2010–2016 Sargent/Meixner, et al., Spitzer Space Telescope/IRAC (renewed 5×)
Period Luminosity Relationships and Mass-Loss Rates of AGB Stars
- 2008 Dalcanton, et al., Hubble Space Telescope/WFC3
A Calibration Database for Stellar Models of AGB Stars (ANGST follow up)

Invited Talks

- July 2017 Invited Talk, The Resolved Universe of Galaxies (Heidelberg)
- July 2017 Invited Talk, Surveys of the Great Andromeda Galaxy (Leiden)
- Mar 2017 Invited Review, The AGB-Supernovae Mass Transition (Rome)
- Jan 2017 Invited Talk, Star Formation in Nearby Galaxies with JWST (Caltech)
- Feb 2016 Colloquium, University of Texas, Austin
- Nov 2015 Invited Seminar, Harvard-Smithsonian Center for Astrophysics
- Oct 2015 Invited Seminar, Royal Observatory of Edinburgh
- Oct 2015 Invited Review, Feedback in the Magellanic Clouds Workshop (STScI)
- June 2015 Invited Review, European Week of Astronomy and Space Science (Tenerife)
- Oct 2014 Colloquium, STScI
- Nov 2013 Colloquium, Academia Sinica Institute of Astronomy and Astrophysics (Taipei)
- Apr 2013 Colloquium, Cornell University
- Apr 2013 Colloquium, Rochester Institute of Technology
- Nov 2012 Colloquium, University of Minnesota
- Oct 2012 Colloquium, University of Delaware
- June 2012 Invited Review, Cool Stars 17 (Barcelona)
- Dec 2011 Colloquium, University of Wisconsin
- July 2009 Post-Doc Colloquium, STScI
- Apr 2009 Colloquium, Gemini South

Other Conference Talks

- Oct 2016 Exploring the Universe with JWST II (Montreal)
- May 2015 A Nice Workshop on AGB Stars (Nice)
- Aug 2014 Why Galaxies Care About AGB Stars III (Vienna)
- Nov 2013 The Life Cycle of Dust in the Universe (Taipei)
- June 2013 Planning the Future: Evolved Stars, Mass Loss, and Dust Production (Cornell)
- Aug 2011 Physical & Chemical Aspects of the Late Stages of Stellar Evolution (Warsaw)
- Oct 2010 WittFest: Origins and Evolution of Dust (U Toledo)
- Aug 2010 Why Galaxies Care About AGB Stars II (Vienna)
- July 2010 HotSci@STScI Talk Series, STScI
- May 2010 Herschel First Results (ESTEC)

Summary: I have published 69 refereed papers, 14 as first author. According to the SAO/NASA Astrophysics Data System, I have an *H*-index of 29 and more than 1900 total refereed citations. Papers with >25 citations are marked with an asterisk, those with >50 citations are marked with 2 asterisks, and those with >100 citations are marked with 3 asterisks.

First-Authored Refereed Publications

14. **Boyer, M. L.**, McQuinn, et al. 2017, ApJ, Submitted
An Infrared Census of Dust in Nearby Galaxies With Spitzer (DUSTiNGS). IV. Discovery of High-Redshift AGB Analogs
13. **Boyer, M. L.**, McDonald, I., et al. 2015, ApJ, 810, 116
Identification of a Class of AGB Stars Struggling to Become Carbon Stars in the Magellanic Clouds
12. **Boyer, M. L.**, McQuinn, K. B. W., et al. 2015, ApJ, 800, 51
An Infrared Census of DUST in Nearby Galaxies with Spitzer (DUSTiNGS), II. Discovery of Metal-poor Dusty AGB Stars
11. **Boyer, M. L.**, McQuinn, K. B. W., et al. 2015, ApJS, 216, 10
An Infrared Census of DUST in Nearby Galaxies with Spitzer (DUSTiNGS), I. Overview
10. ***Boyer, M. L.**, Girardi, L., Marigo, P., et al. 2013, ApJ, 774, 83
Is There a Metallicity Ceiling to Form Carbon Stars? - A Novel Technique Reveals a Scarcity of C Stars in the Inner M31 Disk
9. **Boyer, M. L.** 2013, AN, 334, 124
Dust Production and Mass Loss in Cool Evolved Stars
8. ****Boyer, M. L.**, Srinivasan, S., Riebel, D., McDonald, I., et al. 2012, ApJ, 748, 40
The Dust Budget of the SMC: Are AGB Stars the Primary Dust Source at Low Metallicity?
7. ****Boyer, M. L.**, Srinivasan, S., van Loon, J. Th., et al. 2011, AJ, 142, 103
Surveying the Agents of Galaxy Evolution in the Tidally Stripped, Low Metallicity Small Magellanic Cloud (SAGE-SMC). II. Cool Evolved Stars
6. ***Boyer, M. L.**, Sargent, B., van Loon, J. Th., et al. 2010, A&A, 518, L142
Cold Dust in Three Massive Evolved Stars in the LMC
5. ***Boyer, M. L.**, van Loon, J. Th., McDonald, I., et al. 2010, ApJL, 711, 99
Is Dust Forming on the Red Giant Branch in 47 Tuc?
4. ***Boyer, M. L.**, McDonald, I., van Loon, J. Th., et al. 2009, ApJ, 705, 746
Dust Production and Mass Loss in the Galactic Globular Cluster NGC 362
3. ***Boyer, M. L.**, Skillman, E. D., et al. 2009, ApJ, 697, 1993
A Spitzer Study of Asymptotic Giant Branch Stars. III. Dust Production and Gas Return in Local Group Dwarf Irregular Galaxies
2. ***Boyer, M. L.**, McDonald, I., van Loon, J. Th., et al. 2008, AJ, 135, 1395
A Spitzer Space Telescope Atlas of ω Centauri: The Stellar Population, Mass Loss, and the Intracluster Medium
1. ****Boyer, M. L.**, Woodward, C. E., van Loon, J. Th., et al. 2006, AJ, 132, 1415
Stellar Populations and Mass Loss in M15: A Spitzer Space Telescope Detection of Dust in the Intracluster Medium

Other Refereed Publications

55. Jones, O. C., Woods, P. M., Kemper, F., **et al.** 2017, MNRAS, 470, 3250
The SAGE-Spec Spitzer Legacy Program: The Life-cycle of Dust and Gas in the Large Magellanic Cloud. Point Source Classification -III
54. McQuinn, K., **Boyer, M. L.**, et al. 2017, ApJ, 834, 78
DUSTINGS III. Distribution of Intermediate-Age and Old Stellar Populations in Disks and Outer Extremities of Dwarf Galaxies
53. Kasliwal, M., Bally, J., Masci, F., **et al.** 2017, ApJ, 839, 88
SPIRITS: Uncovering Unusual Infrared Transients with Spitzer
52. Groenewegen, M. A. T., Vlemmings, W., Marigo, P., **et al.** 2016, A&A, 462, 2995
The ALMA Detection of CO Rotational Line Emission in AGB Stars in the Large Magellanic Cloud
51. Matsuura, M., Sargent, B., Yates, J., **et al.** 2016, MNRAS, 462, 2995
The Mass-Loss or Red Supergiants at Low Metallicity: Detection of Rotational CO Emission from Two Red Supergiants in the Large Magellanic Cloud
50. Hamren, K., Beaton, R. L., Guhathakurta, P., Gilbert, K., Tollerud, E., **Boyer, M. L.**, et al. 2016, ApJ, 828, 15
Carbon Stars in the Satellites and Halo of M31
49. Dell’Agli, F., Di Criscienzo, M., **Boyer, M. L.**, & García-Hernández, D. A. 2016, MNRAS, 460, 4230
Evolved Stars in the Local Group Galaxies - I. AGB Evolution and Dust Production in IC 1613
48. Gordon, K. D., Fouesneau, M., Arab, H., **et al.** 2016, ApJ, 826, 104
The Panchromatic Hubble Andromeda Treasury XV. The BEAST: Bayesian Extinction and Stellar Tool
47. Sloan, G. C., Kraemer, K. E., McDonald I., **et al.** 2016, ApJ, 826, 44
The Infrared Spectral Properties of Magellanic Carbon Stars
46. Srinivasan, S., **Boyer, M. L.**, Kemper, F., et al. 2016, MNRAS, 457, 2814
The Evolved-star Dust Budget of the Small Magellanic Cloud: the Critical Role of a Few Key Players
45. Ventura, P., Karakas, A. I., Dell’Agli, F., García-Hernández, D., A., **Boyer, M. L.**, Di Criscienzo, M. 2016, MNRAS, 457, 1456
On the Nature of the Most Obscured C-rich AGB stars in the Magellanic Clouds
44. Sabbi, E., Lennon, D. J., Anderson, J., **et al.** 2016, ApJS, 222, 11
Hubble Tarantula Treasury Project III. Photometric Catalog and Resulting Constraints on the Progression of Star Formation in the 30 Doradus Region
43. Fox, O., Johansson, J., Kasliwal, M., Andrews, J., Bally, J., Bond, H., **Boyer, M. L.**, et al. 2016, ApJL, 816, 13
An Excess of Mid-Infrared Emission from the Type Ia SN 2014dt
42. Britavskiy, N. E., Bonanos, A. Z., Mehner, A., **Boyer, M. L.**, and McQuinn, K. 2015, A&A, 584, 33
Identification of Dusty Massive Stars in Star-Forming Dwarf Irregular Galaxies in the Local Group with Mid-IR Photometry
41. Jones, O., Meixner, M., Sargent, B., **Boyer, M. L.**, et al. 2015, ApJ, 811, 145

- The Dustiest Post-Main-Sequence Stars in the Magellanic Clouds*
40. McDonald, I., Zijlstra, A., Lagadec, E., Sloan, G. C., **Boyer, M. L.**, et al. 2015, MNRAS, 453, 4324
ALMA Reveals Sunburn: CO Dissociation Around AGB Stars in the Globular Cluster 47 Tuc
 39. Hamren, K., Rockosi, C., Guhathakurta, P., **Boyer, M. L.**, et al. 2015, ApJ, 810, 60
A Spectroscopic and Photometric Exploration of the C/M Ratio in the Disk of M31
 38. Riebel, D., **Boyer, M. L.**, et al. 2015, ApJ, 807, 1
SAGE-Var: An Infrared Survey of Variability in the Magellanic Clouds
 37. Ventura, P., Karakas, A., Dell'Agli, F., **Boyer, M. L.**, et al. 2015, MNRAS, 450, 3181
The Large Magellanic Cloud as a Laboratory for Hot Bottom Burning in Massive AGB Stars
 36. Ruffle, P., Kemper, F., Jones, O., **et al.** 2015, MNRAS, 451, 3504
Spitzer Infrared Spectrograph Point Source Classification in the Small Magellanic Cloud
 35. Weisz, D., Johnson, L., Foreman-Mackey, D., **et al.** 2015, ApJ, 806, 198
The High-Mass Stellar Initial Mass Function in M31 Clusters
 34. Williams, B., Dalcanton, J., Dolphin, A., Weisz, D., Lewis, A., Lang, D., Bell, E., **Boyer, M. L.**, et al. 2015, ApJ, 806, 48
A Global Star-Forming Episode in M31 2–4 Gyr Ago
 33. Temim, T., Dwek, E., Tchernyshyov, K., **Boyer, M. L.**, Meixner, M., & Gall, C. 2015, ApJ, 799, 158
Dust Destruction Rates and Lifetimes in the Magellanic Clouds
 32. *Gordon, K., Roman-Duval, J., Bot, Caroline, **et al.** 2014, ApJ, 797, 85
Dust and Gas in the Magellanic Clouds from the HERITAGE Herschel Key Project. I., Dust Properties and Insights into the Origin of the Sub-mm Excess Emission
 31. Jones, O. C., McDonald, I., Rich, R. M., Kemper, F., **Boyer, M. L.**, Zijlstra, A. A., & Bendo, G. J. 2014, MNRAS, 446, 1584
A Spitzer Space Telescope Survey of Extreme Asymptotic Giant Branch Stars in M32
 30. Seale, J., Meixner, M., Sewilo, M., Babler, B., **et al.** 2014, ApJ, 148, 124
HERschel Key Program HERITAGE: A Far-IR Source Catalog for the Magellanic Clouds
 29. **Meixner, M., Panuzzo, P., Roman-Duval, J., **et al.** 2013, AJ, 146, 62
The HERSCHEL Inventory of the Agents of Galaxy Evolution in the Magellanic Clouds, a Herschel Open Time Key Program
 28. *Sabbi, E., Anderson, J., Lennon, D., van der Marel, R., Aloisi, A., **Boyer, M. L.**, et al. 2013, AJ, 146, 53
Hubble Tarantula Treasury Project: Unraveling Tarantula's Web. I. Observational Overview and First Results
 27. Melbourne, J. & **Boyer, M. L.** 2013, ApJ, 764, 30
The Contribution of Thermally-pulsing AGB and RSG Stars to the Luminosities of the Magellanic Clouds at 1-24 microns
 26. *Jones, O. C., Kemper, F., Sargent, B. A., McDonald, I., Gielen, C., Woods, P. M., Sloan, G. C., **Boyer, M. L.**, et al. 2012, MNRAS, 427, 3209
On the Metallicity Dependence of Crystalline Silicates in Oxygen-rich AGB Stars and Red Supergiants

25. ***McDonald, I., Zijlstra, A. A., & **Boyer, M. L.** 2012, MNRAS, 427, 343
Fundamental Parameters and Infrared Excesses of Hipparcos Stars
24. ***Dalcanton, J. J., Williams, B. F., Lang, D., Lauer, T. R., Kalirai, J. S., **et al.** 2012, ApJS, 200, 18
The Panchromatic Hubble Andromeda Treasury
23. **Melbourne, J., Williams, B. F., Dalcanton, J. J., Rosenfield, P., Girardi, L., Marigo, P., Dolphin, A., **Boyer, M. L.**, Olsen, K., Skillman, E., & Seth, A. C. 2012, ApJ, 748, 47
The Contribution of TP-AGB and RHeB Stars to the Near-IR Luminosity of Local Galaxies: Implications for Stellar Mass Measurements of High Redshift Galaxies
22. *Dalcanton, J. J., Williams, B. F., Melbourne, J. L., Girardi, L., Dolphin, A., Rosenfield, P. A., **Boyer, M. L.**, et al. 2012, ApJS, 198, 6
Resolved Near-infrared Stellar Populations in Nearby Galaxies
21. McDonald, I., van Loon, J. Th., Sloan, G., Dupree, A., Zijlstra, A., **Boyer, M. L.**, et al. 2011, MNRAS, 417, 20
Spitzer Spectra of Evolved Stars in ω Centauri and Their Low-Metallicity Dust Production
20. ***Gordon, K., Meixner, M., Meade, M., Whitney, B., Engelbracht, C., Bot, C., **Boyer, M. L.**, et al. 2011, AJ, 142, 102
Surveying the Agents of Galaxy Evolution in the Tidally Stripped, Low Metallicity Small Magellanic Cloud (SAGE-SMC). I. Overview
19. **Olsen, K. A. G., Zaritsky, D., Blum, R. D., **Boyer, M. L.**, & Gordon, K. D. 2011, ApJ, 737, 29
A Population of Accreted Small Magellanic Cloud Stars in the Large Magellanic Cloud
18. *McDonald, I., **Boyer, M. L.**, van Loon, J. Th., & Zijlstra, A. 2011, ApJ, 730, 71
Dust Production and Mass Loss in the Galactic Globular Cluster 47 Tucanae
17. *McDonald, I., **Boyer, M. L.**, van Loon, J. Th., et al. 2011, ApJS, 193, 23
Fundamental Parameters, Integrated RGB Mass Loss and Dust Production in the Galactic Globular Cluster 47 Tucanae
16. **Woods, Paul M., Oliveira, J. M., Kemper, F., van Loon, J. Th., **et al.** 2011, MNRAS, 411,1597
The SAGE-Spec Spitzer Legacy Program: The Life-Cycle of Dust and Gas in the Large Magellanic Cloud. Point Source Classification I
15. ***Girardi, L., Williams, B., Gilbert, K., Rosenfield, P., Dalcanton, J., Marigo, P., **Boyer, M. L.**, et al. 2010, ApJ, 724, 1030
The ACS Nearby Galaxy Survey Treasury IX. Constraining Asymptotic Giant Branch Evolution With Old Metal-Poor Galaxies
14. Clayton, G. C., Sargent, B., **Boyer, M. L.**, et al. 2010, ApJ, 722, 1131
Herschel Observations of a Newly Discovered UX Ori Star in the LMC
13. McDonald, I., van Loon, J. Th., Dupree, A. K., & **Boyer, M. L.** 2010, MNRAS, 405, 1711
Discovery of Long-Period Variable Stars in the Very Metal-poor Globular Cluster M15

12. **Meixner, M., Galliano, F., Hony, S., Roman-Duval, J., Robitaille, T., **et al.** 2010, A&A, 518, L71
HERschel Inventory of The Agents of Galaxy Evolution (HERITAGE): The LMC
11. **Kemper, F., Woods, P., M., Antoniou, V., Bernard, J.-P., Blum, R., **Boyer, M. L.**, et al. 2010, PASP, 122, 683
The SAGE-Spec Spitzer Legacy Program: The Life Cycle of Dust and Gas in the Large Magellanic Cloud
10. **van Loon, J. Th., Oliveira, J., Gordon, K., Meixner, M., Shiao, B., **Boyer, M. L.**, et al. 2010, AJ, 139, 68
A Spitzer Space Telescope Far-Infrared Spectral Atlas of Compact Sources in the Magellanic Clouds. I. The Large Magellanic Cloud
9. *Oliveira, J., M., van Loon, J. Th., Chen, C.-H., R., Tielens, A. G. G. M., Sloan, G. C., Woods, Paul M., Kemper, F., Indebetouw, R., Gordon, K. D., **Boyer, M. L.**, et al. 2009, ApJ, 707, 1269
Ice Chemistry in Embedded Young Stellar Objects in the Large Magellanic Cloud
8. **McDonald, I., van Loon, J. Th., Decin, L., **Boyer, M. L.**, Dupree, A. K., Evans, A., Gehrz, R. D., & Woodward, C. E. 2009, MNRAS, 394, 831
Giants in the Globular Cluster ω Centauri: Dust production, Mass Loss and Distance
7. Barmby, P., **Boyer, M. L.**, Woodward, C. E., Gehrz, R. D., van Loon, J. Th., Fazio, G., Marengo, M., & Polonski, E. 2009, AJ, 137, 207
A Spitzer Search for Cold Dust within Globular Clusters
6. *van Loon, J. Th., **Boyer, M. L.**, & McDonald, I. 2008, ApJL, 680, 49
Spitzer Space Telescope Evidence in NGC 6791: No Super Mass Loss at Supersolar Metallicity to Explain Helium White Dwarfs?
5. *van Loon, J. Th., van Leeuwen, F., Smalley, B., Smith, A. W., Lyons, N. A., McDonald, I., & **Boyer, M. L.** 2007, MNRAS, 382, 1353
A Spectral Atlas of Post-Main-Sequence Stars in Omega Centauri: Kinematics, Evolution, Enrichment and Interstellar Medium
4. *van Loon, J. Th., McDonald, I., Oliveira, J. M., Evans, A., **Boyer, M. L.**, Gehrz, R. D., Polonski, E., & Woodward, C. E. 2006, A&A, 450, 339
The First 8-13 μ m Spectra of Globular Cluster Red Giants: Circumstellar Silicate Dust Grains in 47 Tucanae (NGC 104)
3. *Jones, T. J., Woodward, C. E., **Boyer, M. L.**, Gehrz, R. D., & Polonski, E. 2005, ApJ, 620, 731
Spitzer IRAC Observations of Star Formation in N159 in the Large Magellanic Cloud
2. **Kepler, S. O. **et al.** 2003, A&A, 401, 639
The Ever changing Pulsating White Dwarf GD358
1. Kepler, S. O. **et al.** 2003, BaltA, 12, 45
WET Observations of GD358 in 2000

Published Proceedings & Other Publications (Excluding Abstracts)

25. Whitelock, P. A., Kasliwal, M., & **Boyer, M. L.** 2017, European Physical Journal Web of Conferences, 152, 01009
Spitzer Observations of Large Amplitude Variables in the LMC and IC 1613
24. Jencson, J. E., Kasliwal, M. M., **et al.** 2017, ATel, 10488, 1
Recent Discoveries of Infrared Transients and Variables by SPIRITS
23. Jencson, J. E., Kasliwal, M. M., **et al.** 2017, ATel, 10172, 1
Additional SPIRITS Discoveries of Infrared Transients and Variables without Counterparts in Reference Imaging
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