

Curriculum Vitae

John Feldmeier

Youngstown State University
One University Plaza, Youngstown OH, 44555 U.S.A.
phone work: (330) 941-1381 or 941-3616
fax (330) 941-3121
jjfeldmeier@ysu.edu
<http://www.class.ysu.edu/~jjfeldme/>

Born: San Antonio, Texas, U.S.A.

Education:

Pennsylvania State University, (1994 - 2000) Ph.D., Astronomy & Astrophysics
Dissertation Title: "A Survey of Intracuster Planetary Nebulae in the Virgo Cluster"
Dissertation Adviser: Robin Ciardullo
University of Texas, Austin (1989-1994) B.S. (Physics), B.A. (Astronomy)

Employment:

2006 - present Assistant Professor, Department of Physics and Astronomy
Youngstown State University
2003 - 2006 Astronomy and Astrophysics Postdoctoral Fellow
National Science Foundation
2000 - 2003 Research Associate
Case Western Reserve University
1996 - 2000 Research Assistant, Department of Astronomy and Astrophysics
Pennsylvania State University
1994 - 1996 Teaching Assistant, Department of Astronomy and Astrophysics
Pennsylvania State University

Professional Society Memberships:

American Astronomical Society

Awards, Scholarships and Grants:

Recipient of a (\$881) travel grant from the American Astronomical Society - August 2009
Awarded Faculty Improvement Leave, Youngstown State University for 2010-2011
academic year
Recipient of a (\$848) travel grant from the American Astronomical Society - Summer 2009
Recipient of a (\$147,585) Astronomy & Astrophysics Research Grant, National Science
Foundation, "RUI: New Observations of Intragroup Starlight"
(AST 0807873; FY 2008-2011)

Recipient of a (\$39,184) Cottrell College Science Award, Research Corporation,
 “Searching for intra-group starlight using deep imaging: How and when do stars leave galaxies?” (FY 2009-2010)
 Awarded Research Professorship, Youngstown State University (2008 - 2009)
 Co-Investigator on the (personal portion: \$10,143): NASA Hubble Space Telescope Grant,
 “The Nature of z=3 Lyman-alpha emitters,” (HST-GO-11177; FY 2008)
 Recipient of a (\$850) Advanced Studies grant from Youngstown State University
 (Summer 2007)
 Awarded Research Professorship, Youngstown State University (2007 - 2008)
 Recipient of the (\$194,000) National Science Foundation Astronomy and Astrophysics
 Postdoctoral Fellowship (AST 0302030; 2003-2006)
 Recipient of a (\$954) travel grant from the American Astronomical Society - Spring 2004
 Recipient of a (\$2,700) travel grant from the American Astronomical Society - Summer
 2003
 Recipient of a (\$1,800) travel grant from the American Astronomical Society - Fall 2001
 Co-Investigator on the (\$392,143): NASA Long-Term Space Astrophysics grant,
 “The Origins and Properties of Intracluster Stars,” (FY 2000 - FY2004)
 Pennsylvania State University, Braddock Graduate Fellowship (1996-1997, 1998-2000)
 Pennsylvania State University, Zaccheus Daniel Scholarship (1997-1998)
 Pennsylvania State University, Eberly College of Science Graduate Fellowship (1994-1996)

External Service and National Committees:

Ongoing	Referee for Astronomical Journal, Astrophysical Journal, Astrophysical Journal Letters, Astronomy & Astrophysics, Monthly Notices of the Royal Astronomical Society, Publications of the Astronomical Society of Japan, and The Physics Teacher
May 2009 - present	Guest Moderator, Center for Astronomy Education
Spring 2009	Member of NSF Astronomy Review Panel
March 2008	Session Moderator, Ohio-Region Section of the APS Meeting
June 2006 - August 2009	Committee Member, Committee on the Status of Women in Astronomy (CSWA), American Astronomical Society
Spring 2008	Member of NSF Astronomy Review Panel
Fall 2005 - 2007	National Optical Astronomy Observatories Extragalactic Telescope Allocation Committee
1997 - 2000	Hobby Eberly Telescope First Spectrum Committee
1996 - 1997	Hobby Eberly Telescope Phase II Software Testing Committee

Internal University Service and Internal Committees:

2009 - 2010	Curriculum Committee, College of Science, Technology, Engineering and Mathematics
2009 - 2010	Computer Committee, College of Science, Technology, Engineering and Mathematics
2009 - 2010	Library Representative, Department of Physics & Astronomy
Spring 2009	Session Moderator, Quest: A Forum for Student Scholarship
Spring 2008	Session Moderator, Quest: A Forum for Student Scholarship
Fall 2007 - 2008	Chairman, Senate Academic Research Committee
Spring 2007	Session Moderator, Quest: A Forum for Student Scholarship
2006 - 2007	Workload & Governance Committee, Department of Physics & Astronomy
2006 - 2007	Assessment Committee, Department of Physics & Astronomy
2006 - 2008	Academic Senator, Department of Physics & Astronomy

Invited Scientific Talks & Colloquia:

- “Intracluster light in moderate redshift clusters”, Presented at Joint Discussion 2, XXVII General Assembly of the International Astronomical Union - Rio de Janeiro - Brazil (August 2009)
- “Intracluster light in Virgo and Other Galaxy Clusters”, University of Wyoming (October 2008)
- “First Results from the BOKS Survey - Searching for Extrasolar Planets in the Kepler Field”, Penn State University (September 2007)
- “Lonely Stars: Observational Studies of Intracluster Starlight”, Gettysburg College (November 2006)
- “Intracluster Planetary Nebulae” Waikoloa, Hawaii, at the International Astronomical Union Symposium, 234 (April 2006)
- “Introducing VICS: The Virgo Intracluster Stars Project”, NSF Astronomy & Astrophysics Postdoctoral Symposia (January 2006)
- “Calibrating SN Type Ia using WIYN and the Planetary Nebulae Luminosity Function” WIYN Observatory Board Meeting, Tucson Arizona (April 2005)
- “New Studies of Abell 1413: New light on a well-known ‘cD’ ”, NSF Astronomy & Astrophysics Postdoctoral Symposia (January 2005)
- “Studies of the M81 Group: The Intracluster Star Cliff and Tidal Star Formation” Steward Observatory, University of Arizona (October 2004)
- “Intracluster Planetary Nebulae as Probes of Intracluster Starlight” European Southern Observatory Headquarters, Garching, Germany (May 2004)
- “Extragalactic Planetary Nebulae: One of the Universe’s Swiss Army Knives” Marietta College, Ohio (January 2004)
- “Studies of Intracluster Starlight and Astronomy Education of Homeschoolers” NSF Astronomy & Astrophysics Postdoctoral Symposia (January 2004)

“Zwicky’s Final Challenge: Studies of Intracluster Starlight” Ohio State University (January 2004)

“Studies of Individual Intracluster Stars in Nearby Clusters and Groups” Hubble Space Telescope Science Institute (August 2003)

“The most metal-poor planetary nebula in the Galaxy?” Case Western Reserve University (August 2002)

“Zwicky’s Final Challenge: Studies of Intracluster Starlight” Hubble Space Telescope Science Institute (March 2002)

“Zwicky’s Final Challenge: Studies of Intracluster Starlight” University of Michigan, Ann Arbor (February 2002)

“Intracluster Planetary Nebulae” Canberra, Australia, at the International Astronomical Union Symposium, 209 (November 2001)

“Intracluster Planetary Nebulae in the Virgo Cluster” University of Texas (May 2001)

“Intracluster Planetary Nebulae in the Virgo Cluster: An Update” Case Western Reserve University (November 2000)

“Intracluster Planetary Nebulae and High Redshift Objects”, Lowell Observatory (December 1999)

“Intracluster Planetary Nebulae and High Redshift Objects”, Case Western Reserve University (August 1999)

“Zwicky’s Final Challenge” Kitt Peak National Observatory (March 1998)

Publications:

98 publications, including 5 review articles, 33 papers in refereed journals, 9 conference proceedings, and 51 conference abstracts/circulars. These publications have received more than 1300 citations, with an h-index of 19. These publications are listed below.

Refereed Publications:

Note: †- Supervised or helped supervise undergraduate student in research

Guaita, L., Gawiser, E., Padilla, N., Francke, H., Bond, N. A., Gronwall, C., Ciardullo, R., **Feldmeier**, J. J., Sinawa, S., Blanc, G. A., Virani, S. “Lyman-Alpha-Emitting Galaxies at $z = 2.1$ in ECDF-S: Building Blocks of Typical Present-day Galaxies?” 2009, *Ap. J.*, submitted (astro-ph: 0910.2244)

Doherty, M., Arnaboldi, M., Das, P., Gerhard, O., Aguerri, J.A.L., Ciardullo, R., **Feldmeier**, J.J., Freeman, K.C., Jacoby, G.H., Murante, G. “The Edge of the M87 Halo and Kinematics of the Diffuse Light in the Virgo Cluster Core” 2009, *A. & S.*, **502**, 771

Mihos, J.C., Janowiecki, S., **Feldmeier**, J.J., Harding, P. & Morrison, H.L. “The Connection Between Diffuse Light and Intracluster Planetary Nebulae in the Virgo Cluster”

2009, *Ap. J.*, **698**, 1879

Kenney, J.D.P, Tal, T., Crowl, H., **Feldmeier**, J.J. & Jacoby, G.H. “A Spectacular $H\alpha$ Complex in Virgo: Evidence for a Collision Between M86 and NGC 4438 and Implications for the Collisional ISM Heating of Ellipticals” 2008, *Ap. J. (Letters)*, **687**, 69

Herrmann, K.A., Ciardullo, R., **Feldmeier**, J.J. & Vinciguerra, M. “Planetary Nebulae in Face-On Spiral Galaxies I. Planetary Nebulae Photometry and Distances” 2008, *Ap. J.*, **683**, 630

Arnaboldi, M., Doherty, M., Gerhard, O., Ciardullo, R., Aguerri, J.A.L., **Feldmeier**, J.J., Freeman, K.C., & Jacoby, G.H. “Expansion Velocities and Core Masses of Bright Planetary Nebulae in the Virgo Cluster” 2008, *Ap. J. (Letters)*, **674**, 17

Gawiser, E., Francke, H., Lai, K., Schwanski, K., Gronwall, C., Ciardullo, R., Quadri, R., Orsi, A., Barrientos, F., Blanc, G.A., Fazio, G., **Feldmeier**, J.J., Huang, J., Infante, L., Lira, P., Padilla, N., Treister, E., Urry, C.M., van Dokkum, P.G., Virani, S.N. “Ly α -Emitting Galaxies at $z=3.1$: L* Progenitors in the Act of Formation” 2007, *Ap. J. (Letters)*, **671**, 278

Gronwall, C., Ciardullo, R., Hickey, T., Gawiser, E., **Feldmeier**, J.J., van Dokkum, P., & Herrera, D. “The Luminosity Function of Ly α Galaxies at $z = 3.1$ in the Extended Chandra Deep Field South” 2007, *Ap. J.*, **667**, 79

Feldmeier, J.J., Jacoby, G.H., & Phillips, M.M. ”Calibrating Type Ia Supernovae using the Planetary Nebula Luminosity Function I. Initial Results” 2007, *Ap. J.*, **657**, 76

Williams, B.F., Ciardullo, R., Durrell, P.R., Vinciguerra, M., **Feldmeier**, J.J., Jacoby, G.H., Sigurdsson, S., von Hippel, T., Ferguson, H.C., Tanvir, N.R., Arnaboldi, M., Gerhard, O., Aguerri, J.A.L., Freeman, K. “The Metallicity Distribution of Intracluster Stars in Virgo” 2007, *Ap. J.*, **656**, 756

Durrell, P.R., Williams, B.F., Ciardullo, R., **Feldmeier**, J.J., von Hippel, T., Sigurdsson, S., Jacoby, G.H., Ferguson, H.C., Tanvir, N.R., Arnaboldi, M., Gerhard, O., Aguerri, J.A.L., Freeman, K., & Vinciguerra, M. ”The Resolved Stellar Populations of a Dwarf Spheroidal Galaxy in the Virgo Cluster” 2007, *Ap. J.*, **656**, 746

Williams, B.F., Ciardullo, R., Durrell, P.R., **Feldmeier**, J.J., Sigurdsson, S., Vinciguerra, M., Jacoby, G.H., von Hippel, T., Ferguson, H.C., Tanvir, N.R., Arnaboldi, M., Gerhard, O., Aguerri, J.A.L., Freeman, K. “Virgo’s Intracluster Globular Clusters as seen by the Advanced Camera for Surveys” 2007, *Ap. J.*, **654**, 835

Gawiser, E., van Dokkum, P.G., Gronwall, C., Ciardullo, R., Blanc, G., Castander, F.J.,

- Feldmeier**, J.J., Francke, H., Franx, M., Habberzetzl, L., Herrera, D., Hickey, T., Infante, L., Lira, P., Maza, J., Quadri, R., Richardson, A., Schawinski, K., Schirmer, M., Taylor, E.N., Treister, E., Urry, C.M., Virani, S.N. “The Physical Nature of Lyman Alpha Emitting Galaxies at $z = 3.1$ ” 2006, *Ap. J. (Letters)*, **642**, 13
- Mihos, J.C., Harding, P., **Feldmeier**, J.J., & Morrison, H.L. “Diffuse Light in the Virgo Cluster” 2005, *Ap. J. (Letters)*, **631**, 41
- Ciardullo, R., Sigurdsson, S., **Feldmeier**, J.J., & Jacoby, G.H., “The Progenitors of the Brightest Planetary Nebulae” 2005, *Ap. J.*, **629**, 499
- Feldmeier**, J.J., Ciardullo, R., Jacoby, G.H., Durrell, P.R. “Intracluster Planetary Nebulae in the Virgo Cluster III: Luminosity of the Intracluster Light and Tests of the Spatial Distribution” 2004, *Ap. J.*, **615**, 196
- Ciardullo, R., Durrell, P.R., Laychak, M.B., Herrmann, K.A., Moody, K., Jacoby, G.H., & **Feldmeier**, J.J. “The Planetary Nebula System of M33” 2004, *Ap. J.*, **614**, 167
- Feldmeier**, J.J., Mihos, J.C., Morrison, H.L., Harding, P., Kaib†, N., & Dubinski, J. “Deep CCD Surface Photometry of Galaxy Clusters II: Studies of Intracluster light in non-cD clusters” 2004, *Ap. J.*, **609**, 617
- Immler, S., Brandt, W.N., Vignali, C., Bauer, F.E., Crenshaw, D.M., **Feldmeier**, J.J., & Kraemer, S.B. “Probing the complex and variable X-ray absorption of Markarian 6 with XMM-Newton” 2003, *A. J.*, **126**, 153
- Feldmeier**, J.J., Ciardullo, R., Jacoby, G.H., Durrell, P.R. “Intracluster Planetary Nebulae in the Virgo Cluster II. Imaging Catalog” 2003, *Ap. J. Suppl.*, **145**, 65
- Durrell, P.R., Mihos, J.C., **Feldmeier**, J.J., Jacoby, G.H. & Ciardullo, R. “Kinematics of Planetary Nebulae in M51’s Tidal Debris” 2003, *Ap. J.*, **582**, 170
- Jacoby, G.H., **Feldmeier**, J.J., Claver, C., Garnavich, P.M., Noriega-Crespo, A., Bond, H.E., & Quinn, J. “Confirmation of SBS 1150+599A As An Extremely Metal-Poor Planetary Nebula” 2002, *A. J.*, **124**, 3340
- Ciardullo, R., **Feldmeier**, J.J., Jacoby, G.H., Kuzio†, R., Laychak, M.B., Durrell, P.R. “Planetary Nebulae As Standard Candles. XII. Connecting the Population I and Population II Distance Scales” 2002, *Ap. J.*, **577**, 31
- Feldmeier**, J.J., Mihos, J.C., Morrison, H.L., Rodney, S.A., Harding, P. “Deep CCD Surface Photometry of Galaxy Clusters I: Methods and Initial Studies of Intracluster Starlight” 2002, *Ap. J.*, **575**, 779

Durrell, P.R., Ciardullo, R., **Feldmeier**, J.J., Jacoby, G.H., & Sigurdsson, S. “Intracluster Red Giant Stars in the Virgo Cluster” 2002, *Ap. J.*, **570**, 119

Ciardullo, R., **Feldmeier**, J.J., Krelowet, K., Bartlett, R., Jacoby, G.H., & Gronwall, C. “A Measurement of the Density of Strong Emission Line Galaxies at $z = 3.13$ and their effect on [O III] $\lambda 5007$ Surveys for Intracluster Stars” 2002, *Ap. J.*, **566**, 784

Arnaboldi, M., Aguerri, J.A.L., Napolitano, N.R., Gerhard, O., Freeman, K.C., **Feldmeier**, J.J., Capaccioli, M., Kudritzki, R.-P., Méndez, R.H. “Intracluster Planetary Nebulae in Virgo: Photometric selection, spectroscopic validation and cluster depth” 2002, *A. J.*, **123**, 760

Kudritzki, R.-P., Méndez, R.H., **Feldmeier**, J.J., Ciardullo, R., Jacoby, G.H., Freeman, K.C., Arnaboldi, M., Capaccioli, M., Gerhard, O., Ford, H.C. “Discovery of 9 Ly α emitters at redshift ~ 3.1 using narrow-band imaging and VLT spectroscopy” 2000, *Ap. J.*, **536**, 19

Feldmeier, J.J., Brandt, W.N., Elvis, M., Fabian, A.C., Iwasawa, K. & Mathur, S. “Heavy and Complex X-ray Absorption Towards the Nucleus of Markarian 6.” 1999, *Ap. J.*, **510**, 167

Feldmeier, J.J., Ciardullo, R., & Jacoby, G.H. “Intracluster Planetary Nebulae in the Virgo Cluster I. Initial Results.” 1998, *Ap. J.*, **503**, 109

Ciardullo, R., Jacoby, G.H., **Feldmeier**, J.J., & Bartlett, R. “The Planetary Nebula Luminosity Function of M87 and the Intracluster Stars of Virgo.” 1998, *Ap. J.*, **492**, 62

Feldmeier, J.J., Ciardullo, R., & Jacoby, G.H. “Planetary nebulae as standard candles XI. Tests using spiral galaxies.” 1997, *Ap. J.*, **479**, 231

Feldmeier, J.J., Ciardullo, R., & Jacoby, G.H., “The Planetary Nebula Distance to M101.” 1996, *Ap. J. (Letters)*, **461**, L25

Hough, D.H., Readhead, A.C., Wood, D.A., & **Feldmeier**, J.J., “Three-epoch VLBI observations of the nucleus in the lobe-dominated quasar 3C334.” 1992, *Ap. J.*, **393**, 81

Papers in Preparation:

Durrell, P.R., DeCesar, M.E., Ciardullo, R., Hurley-Keller, D., & **Feldmeier**, J.J., “Serendipitous discovery of tidal star formation in the M81 group” 2009, *Ap. J.*, in preparation

Feldmeier, J.J., Mihos, J.C., Harding, P., & Morrison, H.L., “Deep CCD Surface Photometry of Galaxy Clusters III: Further studies of Intracluster Light” 2009, *Ap. J.*, in preparation

Conference Proceedings:

Feldmeier, J.J. 2006, “Intracluster Planetary Nebulae” *IAU Symposium No. 234 Planetary Nebulae in Our Galaxy and Beyond*, Waikoloa, Hawaii April 3 - 7, 2006 ed. M.J. Barlow & R.H. Méndez, p. 33 (Cambridge University Press) - invited review

Ciardullo, R., Sigurdsson, S., **Feldmeier**, J.J. & Jacoby, G.H. 2005, “The Progenitors of the Brightest Planetary Nebulae” *Planetary Nebulae as Astronomical Tools*, Gdansk Poland, 2005, vol 804, p. 292

Feldmeier, J.J. 2004, “Intracluster Planetary Nebulae as Probes of Intracluster Starlight ” *Planetary Nebulae beyond the Milky Way, Garching (Germany), May 19-21, 2004* ed. J.R. Walsh, L. Stanghellini & N. Douglas (<http://xxx.lanl.gov/abs/astro-ph/0407625>) - invited review

Bhargavi, S.G., Rhoads, J., Perna, R., **Feldmeier**, J.J., & Grenier, J. 2003, “Searching for GRB remnants in nearby galaxies” *Gamma Ray Burst Symposium: Thirty Years after the Discovery* (AIP, <http://xxx.lanl.gov/abs/astro-ph/0312400>)

Feldmeier, J.J., Mihos, J.C., Morrison, H.L., Harding, P., & Kaib†, N. 2003, “Using Intracluster Light to Study Cluster Evolution” *Carnegie Observatories Astrophysics Series, Vol. 3: Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Evolution*, ed. J. S. Mulchaey, A. Dressler, and A. Oemler (Pasadena: Carnegie Observatories, <http://www.ociw.edu/ociw/symposia/series/symposium3/proceedings.html>)

Feldmeier, J.J. 2002, “Intracluster Planetary Nebulae” *IAU Symposium No. 209 Planetary Nebulae: Their Evolution and Role in the Universe*, Canberra, Australia November 19 - 23, 2001 - invited review

Feldmeier, J.J., Durrell, P.R., Ciardullo, R., & Jacoby, G.H. 2002, “A Search for Intra-group Planetary Nebulae in the M81 Group” *IAU Symposium No. 209 Planetary Nebulae: Their Evolution and Role in the Universe*, Canberra, Australia November 19 - 23, 2001

Feldmeier, J.J., Mihos, J.C., Durrell, P.R., Ciardullo, R., & Jacoby, G.H. 2002, “Kinematics of Planetary Nebulae in M51’s Tidal Tail” *IAU Symposium No. 209 Planetary Nebulae: Their Evolution and Role in the Universe*, Canberra, Australia November 19 - 23, 2001

Freeman, K.C., Capaccioli, M., Ciardullo, R., **Feldmeier**, J.J., Ford, H.C., Gerhard, O., Kudritzki, R.-P, Jacoby, G.H., Méndez, R.H., Sharples, R. 2000, "Intracluster Planetary Nebulae in the Virgo cluster," *A.S.P. Conference Series #197, Galaxy Dynamics: from the Early Universe to the Present*, ed. F. Combes, G.A. Mamon, & V. Charmandaris, (San Francisco: Astronomical Society of the Pacific). p. 389

Jacoby, G.H., Ciardullo, R., & **Feldmeier**, J.J. 1998, "Future Directions for the Planetary Nebula Luminosity Function," *A.S.P. Conference Series # 167, Harmonizing Cosmic Distance Scales in a Post-Hipparcos Era*, ed. D. Egret & A. Heck, (San Francisco: Astronomical Society of the Pacific), p. 175

Feldmeier, J.J., Ciardullo, R., Jacoby G.H., & Bartlett, R. 1998, "Intracluster Stars and the Galactic Halos of Virgo," *A.S.P. Conference Series # 136, Galactic Halos: A UC Santa Cruz Workshop*, ed. D. Zaritsky, (San Francisco: Astronomical Society of the Pacific), p. 87

Abstracts and Circulars:

Gawiser, E., Walker, J., Bond N., Gronwall, C., Ciardullo, R., Francke, H., Lira, P., Guaita, L., Padilla, N., **Feldmeier J.** 2008, "Probing the Dark Matter-Galaxy Formation Connection with Lyman Alpha Emitting Galaxies" American Astronomical Society Meeting Abstracts, 213, #313.02

Gronwall, C., Ciardullo, R., Gawiser, E., Bond, N., Guaita, L., & **Feldmeier, J.** 2008, "Luminosity Functions and Photometric Properties of Lyman-alpha Emitters at $z = 3$ " American Astronomical Society Meeting Abstracts, 213, #424.09

Rivera, F., Ganguly, R., **Feldmeier, J.**, & Barlow, R. 2008, "A Catalog of [O III] 5007 Photometric Standards In The Virgo Cluster Region" American Astronomical Society Meeting Abstracts, 213, #473.06

Proctor, A., Howell, S., Sherry, W., Everett, M., von Braun, K., **Feldmeier, J.**, & BOKS Consortium, 2007, "Burrell-Optical-Kepler Survey (BOKS): Exo-planet Search In Cygnus" *Bull. AAS*, **39**, p. 970

Kenney, J. D., Tal, T., Crowl, H., **Feldmeier, J.**, & Jacoby, G. 2007, "A Collisional Debris Trail Around the Virgo Elliptical M86" *Bull. AAS*, **39**, p. 952

Feldmeier, J. J., Herrmann, K. A., Ciardullo, R. B., & Jacoby, G. H. 2007, "Measuring the Production Rate of Planetary Nebulae in Spiral Galaxies" *Bull. AAS*, **39**, p. 898

Gawiser, E.J., Gronwall, C., Ciardullo, R., Francke, H., van Dokkum, P.G., **Feldmeier, J.J.**, Urry, C.M., MUSYC Collaboration 2006, "The Nature of Lyman Alpha Emitters

- at $z=3.1$ in the MUSYC Survey” *Bull. AAS*, **38**, p. 1212
- Ciardullo, R., Gronwall, C., Hickey, T., Gawiser, E., **Feldmeier**, J.J., MUSYC Collaboration 2006, “The Luminosity Function of Lyman Alpha Emitters at $z=3.1$ ” *Bull. AAS*, **38**, p. 1146
- Howell, S.B., **Feldmeier**, J.J., von Braun, K., Everett, M., Mihos, J.C., Harding, P., Knox, C., Sherry, W., Lee, T., Ciardi, D., Rudick, C., Proctor, M., van Belle, G. 2006, “Burrell-Optical-Kepler Survey (BOKS) II: Early Variability Results” *Bull. AAS*, **38**, p. 1127
- Feldmeier**, J.J., Howell, S.B., Harding, P., Mihos, C., Rudick, C., Sherry, W., Lee, T., Knox, C., Ciardi, D., von Braun, K., Everett, M., Proctor, M., van Belle, G. 2006, “Burrell-Optical-Kepler Survey (BOKS) I: Survey Description” *Bull. AAS*, **38**, p. 1127
- Herrmann, K., Ciardullo, R., **Feldmeier**, J.J., Vinciguerra, M. 2006, “PNLF Distances to Six Face-On Spiral Galaxies” *Bull. AAS*, **38**, p. 900
- Hedden, A.S., Knierman, K., Roelofsen, T., Kulesa, C., **Feldmeier**, J.J., Gorjian, V., Durrell, P.R., Sepulveda, B., Spuck, T., Wheeler, C. 2006, “Multiwavelength Observations of Tidally Induced Star Formation in the M81 Group” *Bull. AAS*, **38**, p. 917
- Phillips, M.M., **Feldmeier**, J.J., Jacoby, G.H. 2006, “Calibrating the Hubble Constant Using Planetary Nebula Luminosity Function. Distances to Type Ia Supernovae” *Revista Mexicana de Astronomia y Astrofisica Conference Series*, **26**, 196
- Durrell, P.R., Williams, B.F., Ciardullo, R.B., **Feldmeier**, J.J., Jacoby, G.H., Sigurdsson, S., von Hippel, T., Ferguson, H., Tanvir, N., Arnaboldi, M., Gerhard, O., Aguerri, A., Freeman, K.C., Vinciguerra, M. 2005, “VICS: Stellar Populations of a Dwarf Spheroidal Galaxy in the Virgo Cluster” *Bull. AAS*, **37**, p. 1297
- Ciardullo, R., Williams, B.F., Durrell, P.R., Vinciguerra, M., **Feldmeier**, J.J., Jacoby, G.H., Sigurdsson, S., von Hippel, T., Ferguson, H., Tanvir, N., Arnaboldi, M., Gerhard, O., Aguerri, A., Freeman, K.C. 2005, “VICS: The Virgo Intra-Cluster Stars Project” *Bull. AAS*, **37**, p. 1297
- Williams, B.F., Durrell, P.R., Ciardullo, R., **Feldmeier**, J.J., Jacoby, G. H., Sigurdsson, S., von Hippel, T., Ferguson, H., Tanvir, N., Arnaboldi, M., Gerhard, O., Aguerri, A., Freeman, K. C., & Vinciguerra, M. 2005, “VICS: Intergalactic Globular Clusters in Virgo” *Bull. AAS*, **37**, p. 1298
- Feldmeier**, J. J., Howell, S. B., Mihos, J. C., & Everett, M. E. 2005, “Measuring the Persistence of Stellar Variability using a Two Epoch Imaging Survey” *Bull. AAS*, **37**,

p. 1365

- Jacoby, G. H., Kenney, J. D. P., Tal, T., Crowl, H. H., & **Feldmeier**, J. J. 2005, “Imaging and Spectroscopy of Large Scale H- α Filaments in M86” *Bull. AAS*, **37**, p. 1392
- Mihos, C., Harding, P., **Feldmeier**, J.J., & Morrison, H. 2005, “Imaging Virgo’s Diffuse Intracluster Light” *Bull. AAS*, **37**, p. 1449
- Holley-Bockelmann, K., Sigurdsson, S., Ciardullo, R., **Feldmeier**, J.J., Mihos, C., & McBride, C. 2005, “Binary Black Hole Ejections of Intracluster Planetary Nebulae” AAS/Division of Dynamical Astronomy Meeting, 36,
- Jacoby, G.H., Phillips, M., & **Feldmeier**, J.J. 2004, “Calibrating SN Type Ia in Early-Type Galaxies using the Planetary Nebulae Luminosity Function” *Bull. AAS*, **36**, p. 1460
- Hickey, T., Gronwall, C., Ciardullo, R., **Feldmeier**, J.J., Gawsier, E., Herrera, D., MUSYC Collaboration 2004, “Ly α Emitters at $z = 3.1$ in the Extended CDF-S/GOODS-S Field” *Bull. AAS*, **36**, p. 1447
- Ciardullo, R., Sigurdsson, S., **Feldmeier**, J.J., & Jacoby, G.H. 2004, “The Progenitors of the Brightest Planetary Nebulae in Elliptical Galaxies” *Bull. AAS*, **36**, p. 1570
- Feldmeier**, J.J., Mihos, J.C., Morrison, H.L., & Harding, P. 2004, “New results from an Intracluster Light Imaging Survey” *Bull. AAS*, **36**, p. 1591
- DeCesar, M.E., Durrell, P.R., Ciardullo, R., Hurley-Keller, D., & **Feldmeier**, J.J. 2003, “A Search for Stars in the M81 Group’s HI Tidal Tails” *Bull. AAS*, **35**, p. 1396
- Durrell, P.R., Ciardullo, R., DeCesar, M.E., & **Feldmeier**, J.J. 2003, “Searching for Intergalactic Stars in the M81 Galaxy Group” *Bull. AAS*, **35**, p. 1287
- Feldmeier**, J.J., Mihos, J.C., Morrison, H.L., & Harding, P. 2003, “New results from an Intracluster Star Imaging Survey” *Bull. AAS*, **35**, p. 1282
- Feldmeier**, J.J., Ciardullo, R., Jacoby, G.H., & Durrell, P.R. 2003, “Intracluster Planetary Nebulae in Galaxy Clusters and Groups” IAU 25th General Assembly, Symposium 217, p. 24
- Ciardullo, R., Mihos, J.C., **Feldmeier**, J.J., Durrell, P.R., & Sigurdsson, S. 2003, “The Systematics of Intracluster Starlight” IAU 25th General Assembly, Symposium 217, p. 31
- Durrell, P.R., DeCesar, M., Ciardullo, R., & **Feldmeier**, J.J., 2003, “A CFH12k Survey

of RGB Stars in the M81 Group” IAU 25th General Assembly, Symposium 217, p. 32

Feldmeier, J.J. Mihos, J.C., Morrison, H.L., Harding P., & McBride, C. 2003, “Results from a diffuse intracluster light survey” IAU 25th General Assembly, Symposium 217, p. 32

Durrell, P.R., Ciardullo, R., Laychak, M.B., Jacoby, G.H., **Feldmeier** J.J., & Moody, K. 2003, “The kinematics of M33’s Disk Planetary Nebulae” *Bull. AAS*, **34**, p. 1116

Durrell, P.R., Mihos, J.C., **Feldmeier**, J.J., Jacoby, G.H., & Ciardullo, R. 2002, “Kinematics of Planetary Nebulae in M51’s Tidal Tail” *J.R.A.S.C.*, **96**,

Laychak, M.B., Ciardullo, R., **Feldmeier**, J.J., & Jacoby G.H. 2002, ”A Comparison Between Extragalactic Distances Derived From Cepheids, Planetary Nebulae, and Surface Brightness Fluctuations” *Bull. AAS*, **33**, p. 1518

Durrell, P.R., **Feldmeier** J.J., Ciardullo R., Jacoby G.H. & Mihos J.C. 2002, “Kinematics of Planetary Nebulae in M51’s Tidal Tail” *Bull. AAS*, **33**, p. 1378

Durrell, P.R., Ciardullo, R., **Feldmeier**, J.J., Jacoby, G.H., Sigurdsson, S. 2001, “Intracluster Stars in the Virgo Cluster” *J.R.A.S.C.*, **95**, p. 141

Feldmeier, J.J. Mihos, J.C., Morrison, H.L., Rodney, S. & Harding P. 2001, “First results from an Intracluster Light Survey” *Bull. AAS*, **32**, p. 1579

Durrell, P.R., Ciardullo, R., **Feldmeier**, J.J. & Jacoby, G.H. 2001, “Intracluster Stars in the Virgo Cluster” *Bull. AAS*, **32**, p. 1579

Krelove†, K., **Feldmeier**, J.J., Ciardullo, R., & P.R. Durrell 2001, “Intracluster Planetary Nebulae in the Fornax Cluster” *Bull. AAS*, **32**, p. 1580

Feldmeier, J.J. 2000, “A Search for Intracluster Planetary Nebulae in the Virgo Cluster” *Bull. AAS*, **31**, p. 1551

Krelove†, K., Ciardullo, R., **Feldmeier**, J.J., & Jacoby, G.H. 2000, “Setting a Limit on Contamination of Intracluster Star Surveys” *Bull. AAS*, **31**, p. 1493

Kuzio, R.E., Ciardullo, R., **Feldmeier**, J.J., & Jacoby, G.H. 2000, “Planetary Nebula Luminosity Function Distances to M 33, NGC 2403 and NGC 3627 and a Comparison to the Cepheid Distance Scale” *Bull. AAS*, **31**, p. 1391

Jacoby, G., Ciardullo, R., **Feldmeier**, J., Hinkle, K., & Joyce, R. 1999, “V4334 Sagittarii,” *IAU Circ.* 7155.

Brandt, W.N., **Feldmeier**, J.J., Elvis, M., Mathur, S., Fabian, A.C., Iwasawa, K. 1999, "Heavy and Complex Absorption in Markarian 6: A View Through a Torus Atmosphere?" *Bull. AAS*, **30**, p. 1253.

Duric, N., Pannuti, T.G., Jones, L.V., Elston, R.J., Lacey, C.K., **Feldmeier**, J.J., Ciardullo, R., & Jacoby G.H. 1999, "The Unusual Properties of the H II Region SP-44 in the Scd Galaxy NGC 2403," *Bull. AAS*, **30**, p. 1277.

Feldmeier, J.J., Ciardullo, R., & Jacoby, G.H. 1999, "Planetary Nebulae and the Intracluster Stars of Virgo," *Bull. AAS*, **30**, p. 1304.

Feldmeier, J.J., Ciardullo, R., & Jacoby, G.H. 1996, "Planetary Nebula Distances to the Spiral Galaxies M51, M96, and M101," *Bull. AAS*, **27**, p. 1293.

Ciardullo, R., Jacoby, G.H., & **Feldmeier**, J.J. 1995, "Constraining the Stellar Populations of Elliptical Galaxies with Planetary Nebulae," *Bull. AAS*, **26**, p. 1400.

Research Undergraduate Students Supervised:

Supervised Michael Polewan, OSU Undergraduate, Summer 2009. Michael reduced and analyzed an interesting emission-line object found accidentally in a survey of the SMC.

Supervised Shane Downing, YSU Undergraduate, Summer 2009 - present. Shane is looking for intracluster light in compact groups of galaxies.

Supervised Daniel Nemergut, YSU Undergraduate, Spring 2009 - present. Daniel is calibrating [O III] emission-line standard stars for an upcoming research project.

Supervised Deidra Nuss, YSU Undergraduate, Fall 2008 - present. Deidra is assisting in astronomy education research, studying the resistance of students to active learning techniques.

Supervised Rebecca Kutsko, YSU undergraduate, Fall 2007 - present. Rebecca is searching for asteroids in the BOKS survey, and has presented her research at Quest 2008 and 2009.

Supervised Matthew Boser, YSU undergraduate, Spring 2007 - Summer 2007. Matthew assisted in astronomy education research.

Supervised Ashley Skalsky, YSU undergraduate, Fall 2006 - present. Ashley has presented research at Quest 2007 and 2008, and is studying extragalactic planetary nebulae in external galaxies.

Supervised Zachary Brown, YSU honors undergraduate, Fall 2006 - Fall 2007. Zach has presented research at Quest 2007, and has been involved in searching for extra-solar planets in the BOKS survey.

Supervised Stuart Robbins, CWRU undergraduate, Fall 2003 and Spring 2004, and assisted in searching for planetary nebulae in the M81 system. Stuart is currently an astronomy graduate student in the Department of Astrophysical and Planetary Sciences at the University of Colorado, Boulder

Supervised Cameron McBride, CWRU undergraduate, Summer 2002. Cameron is currently a postdoctoral fellow at Vanderbilt University.

Supervised Nathan Kaib, CWRU honor undergraduate, Spring 2002. Nathan is currently an astronomy graduate student at the University of Washington.

Supervised Kara Krelove & Rachel Kuzio, two honors Penn State undergraduates, Summer & Fall 1999, Spring 2000. Kara received a masters degree in Geosciences in 2005 at Arizona State University and Rachel is currently National Science Foundation Astronomy and Astrophysics Postdoctoral Fellow at UC Irvine.

Research mentor in the Penn State Upward Bound Math and Science program, Summer 1997. Supervised Than Nguyen, a high school student.

Teaching Publications and Teacher Training:

Feldmeier, J.J., Durrell, P.R., Boser, M., Brown, Z. 2007, "Applying Learner-Centered Methods to Introductory Astronomy Courses at Youngstown State University" - published in *Cosmos in the Classroom 2007: A National Symposium on Teaching Astronomy for Non-science Majors* (Astronomy Society of the Pacific)

Roelofsen, T.E.M., **Feldmeier**, J.J., Gorjian, V., Sepulveda, B., Sharma, E., Spuck, T., Wheeler, C. 2006, "Spitzer Space Telescope Research Program for Teachers and Students: Using Spitzer data in your classroom with (relatively) simple software" *Bull. AAS*, **38**, p. 1202

Participant in the NASA Center for Astronomy Education workshop Advanced Strategies for Creating a Learner-Centered Introductory Astronomy Course: A Teaching Excellence Workshop (16 hours) January 4-5, 2007

Durrell, P.R., Young, W., Pirko, R., Shanks, S.L., Neiheisel, J., Dean, M.E., Kotel, R., Schaefer, S., Morlan, R., Wilson, A., **Feldmeier**, J.J. 2005, "Upgrading the Ward Beecher Planetarium for the 21st Century" *Bull. AAS*, **37**, p. 1264

Participant in the NASA Center for Astronomy Education workshop Learner-Centered Astronomy: A Teaching Excellence Workshop (16 hours) August 6-7, 2005

Teaching Assistant for Astronomical Methods & The Solar System (3 credit lecture class for astronomy majors), Astronomy of the distant universe (3 credit lecture course for astronomy majors), & Elementary Astronomy Laboratory (1-credit laboratory for non-majors)

Author of three labs for “Astronomy 11 Laboratory,” edited by J. Harlow, Hayden-McNeill Publishing, Inc., 1996.

Outreach Activities:

Speaker, Astroblast, Oil City Region Astronomical Society, August 22, 2009. Talk Title: “Exploring Galaxy Clusters”

Speaker, Ward Beecher Planetarium, March 20, 2009. Talk Title: “Einstein: Physicist, Philosopher, Humanitarian, Part 1”

Speaker, Ward Beecher Planetarium, November 7, 14, 21, 2008. Talk Title: “Of Space and Time”

Speaker, Astroblast, Oil City Region Astronomical Society, September 27, 2008. Talk Title: “Extrasolar Planets”

Speaker, Mahoning Valley Astronomical Society, OTAA Convention, August 2, 2008. Talk Title: “Science with 0.6m Burrell Schmidt: Intracluster Light and Extrasolar Planet Hunting”

Speaker, Ward Beecher Planetarium, March 29, 2008. Talk Title: “Extrasolar Planets”

Outreach in popular press, *The Jambar* - concerning Satellite USA 193, February 21st, 2008

Participant in the Exploring Careers through Electronic Liasons (ExCEL) program at Boardman Middle School, Spring 2007. Mentored David Tamulonis, a middle school student in careers in astronomy.

Speaker, Ward Beecher Planetarium, March 23, 2007. Talk Title: “ASTRO 101: Stars Between the Galaxies”

Outreach in popular press, WKBN Channel 27, WYTV Channel 33 - August 24, 2006

Outreach in popular press, *Sky & Telescope* magazine - May 2006, p. 25

Outreach, talk at Canfield Rotary Club, April 14, 2006 - Tom Danko host - "Galaxy Crashes and the Hubble Space Telescope - or how to get your picture in the Vindicator"

Outreach in NOAO/NSO Newsletter 85, March 2006, page 48. - outreach concerning NASA-NOAO Spitzer Teacher's projects

Outreach in popular press, Mahoning Valley *Tribune Chronicle*, February 10, 2006 - outreach and press release concerning Virgo Intracluster Survey results

Outreach in popular press, Youngstown *Vindicator*, Akron *Beacon Journal*, Feb 9, 2006 - outreach and press release concerning Virgo Intracluster Survey results

Outreach to high school science teachers as part of "NASA Spitzer Space Telescope Observing Program for Students and Teachers" - see <http://www.spitzer.caltech.edu/Media/releases/ssc2005-05/release.shtml>, November 2004 - Jan 2005

Outreach in NOAO/NSO Newsletter 80, December 2004, page 3.

Taught a seminar course in Astronomy Career Development to Case Undergraduates - Spring 2004

Outreach in popular press, WTAM-1100 Cleveland, May 15, 2003 - outreach on lunar eclipse

Outreach in popular press, *Sky & Telescope* magazine - May 2003, p. 19

Outreach, talk at Cleveland Astronomical Society - March 2003, "Zwicky's final challenge"

Instructor, Cleveland Learning Cooperative, Fall 2001, Spring 2002, Fall 2002, Spring 2003, & Fall 2003 - taught astronomy and physics courses to middle-school and high-school age homeschoolers.

Outreach in popular press, press release at AAS meeting 193, January 1999, "Trail of Dying Green Stars Leads to Millions of Stars Hiding in Galaxy Clusters."

Lecturer in Penn State Inservice Workshops in Astronomy - June 1998, June 1999

Judge in Pennsylvania Junior Academy of Science state competition - May 1998

Outreach in popular press, *Astronomy* magazine - August 1996 & May 1998

Outreach in popular press, *Sky & Telescope* magazine - July 1996

Popular outreach to elementary school-age children as part of Penn State's astronomy outreach program

Teaching Assignments

Semester	Course Title	Sections	Enrollment	Percentage Approval
Fall 2009	Observational Techniques I	1	3	
Fall 2009	Descriptive Astronomy	3	156, 154, 144	
Spring 2009	Undergraduate Research	1	1	
Fall 2008	Undergraduate Research	1	3	
Fall 2008	Descriptive Astronomy	3	155, 135, 29	95%, 99%, 99%
Spring 2008	Observational Techniques II	1	3	
Fall 2007	Descriptive Astronomy	2	156, 71	85%, 93%, 93%
Fall 2007	Observational Techniques I	1	7	
Spring 2007	Special Topics in Physics	1	1	
Spring 2007	Descriptive Astronomy	3	152, 112, 55	92%, 84%, 81%
Fall 2006	Descriptive Astronomy	3	157, 150, 52	85%, 88%, 88%
Spring 2006	Descriptive Astronomy	1	158	56%
Spring 2006	Observational Techniques II	1	3	

Courses Developed and Course Descriptions:

Descriptive Astronomy (ASTRO 1504): A non-mathematical survey course of astronomy for non-science majors. Uses Peer Instruction and Lecture Tutorials from the Conceptual Astronomy and Physics Education Research group to enhance student learning, as well as other interactive techniques. (Taught in Spring 2006, Fall 2006, Spring 2007, Fall 2007, Fall 2008, Fall 2009)

Observational Techniques I (ASTRO 4811): An upper-division course concerning the observation and reduction of astronomical data. Topics include astrometry, telescopes, optics, broad-band imaging and their applications to astronomical problems. (Taught in Fall 2007, Fall 2009)

Observational Techniques II (ASTRO 4812): An upper-division course concerning the observation and reduction of astronomical data. Topics include narrow-band optical imaging, surface photometry, optical spectroscopy, and X-ray astronomy. (Taught in Spring 2006, Spring 2008)

Undergraduate Astronomy Research (ASTRO 4815): An upper-division course for independent undergraduate research, usually ending in a capstone project for seniors. (Taught in Fall 2008, Spring 2009)

Special Topics in Physics (PHYS 5850): An upper-division course for students engaging in physics and astronomy research. (Taught in Spring 2007)