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PROFESSIONAL HISTORY

The University of Texas at Austin

McDonald Observatory Director; Professor; Frank and Susan Bash Endowed Chair;
June 2014-present

W. M. Keck Observatory

Observatory Director, 2006-2014

National Optical Astronomy Observatory

Director, NOAO Gemini Science Center, and Associate Director, NOAO, 2002-2006

Acting Head, U.S. Gemini Program, 2001-2002

United States Gemini Project Manager, 2000-2006

Acting Director, NOAO Instrumentation Program, 1997

Astronomer with Tenure, 2001-2006

Associate Astronomer with Tenure, 1996-2001

Associate Astronomer, 1993-1995

Assistant Astronomer, 1989-1993

Postdoctoral Research Associate, 1987-1989

Wesleyan University

Visiting Instructor, Wesleyan University, Department of Astronomy, spring & fall 1985

EDUCATION

Yale University, Ph.D. in Astronomy, 1988

Yale University, M.Phil. in Astronomy, 1985

Yale University, M.S. in Astronomy, 1984

Wesleyan University, B.A. in Astronomy (with High Honors), 1982

TAFT E. ARMANDROFF

RESEARCH INTERESTS

Dwarf Spheroidal Galaxies
Stellar Populations in the Galaxy and Nearby Galaxies
Globular Clusters
Astronomical Instrumentation

AWARDS AND DISTINCTIONS

NASA Group Achievement Award (for Keck Observatory Archive), 2015
Sturm Memorial Lecturer, Wesleyan University, 2009
Distinguished Alumnus Award, Wesleyan University, 2007
AURA Science Award, 1999
Dirk Brouwer Prize for Contribution of Unusual Merit to Astronomy, Yale Univ., 1988
Littell Prize in Astronomy, Wesleyan University, 1982

SELECTED COMMITTEE SERVICE

Board of Directors, Giant Magellan Telescope Organization (GMTO), 2014-present
Board Committees, GMTO: Development Committee; New Partners Committee
Board of Directors, Hobby-Eberly Telescope, 2014-present
Mauna Kea Management Board, University of Hawaii, 2013-2014
Observatory Council, Association of Universities for Research in Astronomy (AURA), 2009-2015
Science Steering Committee, Keck Observatory, *Ex Officio*, 2006-2014
Advancement Advisory Council, Keck Observatory, *Ex Officio*, 2006-2014
Keck Observatory 20th Anniversary Science Meeting Organizing Committee, Chair, 2012-2013
Mathematical and Physical Sciences Advisory Committee, National Science Foundation, 2009-2012
External Advisory Panel, Thirty Meter Telescope, 2010
International Time Allocation Committee, Gemini Observatory, 2002-2006
Operations Working Group, Gemini Observatory, 2001-2006
Gemini Science Committee, Gemini Observatory, 2000-2006
Board of Directors and Board Secretary, WIYN Consortium Inc., 1999-2002

PUBLICATIONS

Refereed Journal Articles

"Deep Keck u-Band Imaging of the Hubble Ultra Deep Field: A Catalog of $z \sim 3$ Lyman Break Galaxies," Rafelski, M., Wolfe, A. M., Cooke, J., Chen, H.-W., Armandroff, T. E., and Wirth, G. D. 2009, *ApJ*, 703, 2033

"First L-Band Interferometric Observations of a Young Stellar Object: Probing the Circumstellar Environment of MWC 419," Ragland, S., Akeson, R. L., Armandroff, T., Colavita, M. M., Danchi, W. C., Hillenbrand, L. A., Millan-Gabet, R., Ridgway, S. T., Traub, W. A., Vasisht, G., and Wizinowich, P. L. 2009, *ApJ*, 703, 22

"The Dwarf Spheroidal Companions to M31: Variable Stars in Andromeda I and Andromeda III," Pritzl, B. J., Armandroff, T. E., Jacoby, G. H., and Da Costa, G. S. 2005, *AJ*, 129, 2232

"The Dwarf Spheroidal Companions to M31: Variable Stars in Andromeda II," Pritzl, B. J., Armandroff, T. E., Jacoby, G. H., and Da Costa, G. S. 2004, *AJ*, 127, 318

"The Dwarf Spheroidal Companions to M31: Variable Stars in Andromeda VI," Pritzl, B. J., Armandroff, T. E., Jacoby, G. H., and Da Costa, G. S. 2002, *AJ*, 124, 1464

"WIYN Open Cluster Study. VIII. The Geometry and Stability of the NOAO CCD Mosaic Imager," Platais, I., Kozhurina-Platais, V., Girard, T. M., van Altena, W. F., Klemola, A. R., Stauffer, J. R., Armandroff, T. E., Mighell, K. J., Dell'Antonio, I. P., Falco, E. E., and Sarajedini, A. 2002, *AJ*, 124, 601

"The Dwarf Spheroidal Companions to M31: WFPC2 Observations of Andromeda III," Da Costa, G. S., Armandroff, T. E., and Caldwell, N. 2002, *AJ*, 124, 332

"Structure of the Draco Dwarf Spheroidal Galaxy," Piatek, S., Pryor, C., Armandroff, T. E., and Olszewski, E. W. 2002, *AJ*, 123, 2511

"Stars of the Draco Dwarf Spheroidal Galaxy Beyond its Measured Tidal Boundary," Piatek, S., Pryor, C., Armandroff, T. E., and Olszewski, E. W. 2001, *AJ*, 121, 841

"The Age of the Inner Halo Globular Cluster N6C 6652," Chaboyer, B., Sarajedini, A., and Armandroff, T. E. 2000, *AJ*, 120, 3102

"Neutron-Capture Elements in the Early Galaxy: Insights from a Large Sample of Metal-Poor Giants," Burris, D. L., Pilachowski, C. A., Armandroff, T. E., Sneden, C., Cowan, J. J., and Roe, H. 2000, *ApJ*, 544, 302

"The Dwarf Spheroidal Companions to M31: WFPC2 Observations of Andromeda II," Da Costa, G. S., Armandroff, T. E., Caldwell, N., and Seitzer, P. 2000, *AJ*, 119, 705

"A Survey for Low Surface Brightness Galaxies Around M31. II. The Newly Discovered Dwarf Andromeda VI," Armandroff, T. E., Jacoby, G. H., and Davies, J. E. 1999, *AJ*, 118, 1220

"A Survey for Low Surface Brightness Galaxies Around M31. I. The Newly Discovered Dwarf Andromeda V," Armandroff, T. E., Davies, J. E., and Jacoby, G. H. 1998, *AJ*, 116, 2287

"Dwarf Elliptical Galaxies in the M81 Group: The Structure and Stellar Populations of BK5N and F8D1," Caldwell, N., Armandroff, T. E., Da Costa, G. S., and Seitzer, P. 1998, *AJ*, 115, 535

- “The Dwarf Spheroidal Companions to M31: WFPC2 Observations of Andromeda I,” Da Costa, G. S., Armandroff, T. E., Caldwell, N., and Seitzer, P. 1996, *AJ*, 112, 2576
- “The Average Oxygen Abundance in the Globular Cluster M13,” Pilachowski, C. A., and Armandroff, T. E. 1996, *AJ*, 111, 1175
- “The Mass-to-Light Ratios of the Draco and Ursa Minor Dwarf Spheroidal Galaxies. II. The Binary Population and its Effect on the Measured Velocity Dispersions of Dwarf Spheroidals,” Olszewski, E. W., Pryor, C., and Armandroff, T. E. 1996, *AJ*, 111, 750
- “Hot, Luminous Stars in Selected Regions of NGC 6822, M31, and M33,” Massey, P., Armandroff, T. E., Pyke, R., Patel, K., and Wilson, C. D. 1995, *AJ*, 110, 2715
- “The Mass-to-Light Ratios of the Draco and Ursa Minor Dwarf Spheroidal Galaxies. I. Radial Velocities from Multi-Fiber Spectroscopy,” Armandroff, T. E., Olszewski, E. W., and Pryor, C. 1995, *AJ*, 110, 2131
- Abundances and Kinematics of the Globular Cluster Systems of the Galaxy and of the Sagittarius Dwarf,” Da Costa, G. S., and Armandroff, T. E. 1995, *AJ*, 109, 2533
- “The Massive Star Content, Reddening and Distance of the Nearby Irregular Galaxy IC 10,” Massey, P., and Armandroff, T. E. 1995, *AJ*, 109, 2470
- “The Dwarf Spheroidal Companions to M31: A Color-Magnitude Diagram for And III,” Armandroff, T. E., Da Costa, G. S., Caldwell, N., and Seitzer, P. 1993, *AJ*, 106, 986
- “Metallicities for the Outer-Halo Globular Clusters Pal 3, 4, and 14,” Armandroff, T. E., Da Costa, G. S., and Zinn, R. 1992, *AJ*, 104, 164
- “The Metal Abundance and Age of the Globular Cluster Ruprecht 106,” Da Costa, G. S., Armandroff, T. E., and Norris, J. E. 1992, *AJ*, 104, 154
- “IC 10: A ‘Poor Cousin’ Rich in Wolf-Rayet Stars,” Massey, P., Armandroff, T. E., and Conti, P. S. 1992, *AJ*, 103, 1159
- “The Dwarf Spheroidal Companions to M31: Surface-Brightness Profiles,” Caldwell, N., Armandroff, T. E., Seitzer, P., and Da Costa, G. S. 1992, *AJ*, 103, 840
- “Wolf-Rayet Stars in Local Group Galaxies: Numbers and Spectral Properties,” Armandroff, T. E., and Massey, P. 1991, *AJ*, 102, 927
- “Metallicities for Old Stellar Systems from Ca II Triplet Strengths in Member Giants,” Armandroff, T. E., and Da Costa, G. S. 1991, *AJ*, 101, 1329
- “Standard Globular Cluster Giant Branches in the $M_I(V-I)_0$ Plane,” Da Costa, G. S., and Armandroff, T. E. 1990, *AJ*, 100, 162
- “A Spectroscopic Binary Giant in the Galactic Cluster NGC 752,” Pilachowski, C. A., Willmarth, D. W., Mathieu, R. D., Latham, D. W., Booth, J., and Armandroff, T. E. 1989, *PASP*, 101, 991
- “The Properties of the Disk System of Globular Clusters,” Armandroff, T. E. 1989, *AJ*, 97, 375

- “Color-Magnitude Diagrams for Six Metal-Rich, Low-Latitude Globular Clusters,” Armandroff, T. E. 1988, *AJ*, 96, 588
- “Integrated-Light Spectroscopy of Globular Clusters at the Infrared Ca II Lines,” Armandroff, T. E., and Zinn, R. 1988, *AJ*, 96, 92
- “The Spectra of Extragalactic Wolf-Rayet Stars,” Massey, P., Conti, P. S., and Armandroff, T. E. 1987, *AJ*, 94, 1538
- “Massive Stars in M31,” Massey, P., Armandroff, T. E., and Conti, P. S. 1986, *AJ*, 92, 1303
- “The Radial Velocity, Velocity Dispersion, and Mass-to-Light Ratio of the Sculptor Dwarf Galaxy,” Armandroff, T. E., and Da Costa, G. S. 1986, *AJ*, 92, 777
- “Two Cepheid Variables in the Fornax Dwarf Galaxy,” Light, R. M., Armandroff, T. E., and Zinn, R. 1986, *AJ*, 92, 43
- “Wolf-Rayet Stars in NGC 6822 and IC 1613,” Armandroff, T. E., and Massey, P. 1985, *ApJ*, 291, 685
- “An Interpretation of the Gap on the Subgiant Branch of Several Globular Clusters,” Armandroff, T. E., and Demarque, P. 1984, *A&A*, 139, 305
- “The Photometric Variability of Solar-Type Stars. II. Stars Selected from Wilson’s Chromospheric Activity Survey,” Radick, R. R., Wilkerson, M. S., Worden, S. P., Africano, J. L., Klimke, A., Ruden, S., Rogers, W., Armandroff, T. E., and Giampapa, M. S. 1983, *PASP*, 95, 300
- “Distances to 14 Molecular Clouds (Including Two Associated with Supernova Remnants) by a New Technique,” Armandroff, T. E., and Herbst, W. 1981, *AJ*, 86, 1923
- “The Degree of Completeness of Nearby Stars and the Stellar Luminosity Function,” Uggren, A. R., and Armandroff, T. E. 1981, *AJ*, 86, 1898

Invited Review Papers

- “The Andromeda Dwarf Spheroidal Galaxies,” Armandroff, T. E., and Da Costa, G. S., 1999, invited review in *The Stellar Content of Local Group Galaxies*, IAU Symposium No. 192, ed. P. Whitelock and R. Cannon (ASP, San Francisco), p. 203
- “A Survey for Low Surface Brightness Dwarf Galaxies Around M31,” Armandroff, T. E., Davies, J. E., and Jacoby, G. H., 1999, invited paper in *The Low Surface Brightness Universe*, IAU Colloquium No. 171, ed. J. I. Davies et al. (ASP, San Francisco), p. 111
- “The Use of CCDs on Schmidt Telescopes,” Armandroff, T. E., 1995, invited review in *The Future Utilization of Schmidt Telescopes*, IAU Colloquium No. 148, ed. J. Chapman et al. (ASP, San Francisco), p. 21
- “The Dwarf Spheroidal Companions to M31,” Armandroff, T. E., 1994, invited review in *Dwarf Galaxies*, ed. G. Meylan and P. Prugniel (ESO, Garching), p. 211
- “Globular Clusters of the Outer Halo as Probes of the Galaxy’s Structure and Early Evolution,” Armandroff, T. E., 1993, in *Galaxy Evolution: The Milky Way Perspective*, ed. S. Majewski (ASP, San Francisco), p. 167

“The Disk Population of Globular Clusters,” Armandroff, T. E., 1993, invited review in *The Globular Cluster-Galaxy Connection*, ed. G. H. Smith and J. P. Brodie (ASP, San Francisco), p. 48

“Wolf-Rayet Stars in Nearby Galaxies: Facts and Fancies,” Massey, P., and Armandroff, T. E., 1991, invited review in *Wolf-Rayet Stars and Interrelations with Other Massive Stars in Galaxies*, IAU Symposium No. 143, ed. K. A. van der Hucht and B. Hidayat (Kluwer, Dordrecht), p. 575

Significant Unrefereed Papers

“Input from McDonald Observatory to the Committee on a Strategy to Optimize the U.S. OIR System in the Era of the LSST for Questions 3 and 10,” Armandroff, T. E. 2014, White paper for “A Strategy to Optimize the U.S. Optical and Infrared System in the Era of the Large Synoptic Survey Telescope,” Board on Physics and Astronomy, National Research Council

“Input from McDonald Observatory to the Committee on a Strategy to Optimize the U.S. OIR System in the Era of the LSST for Question 7,” Armandroff, T. E., Hill, G., Jaffe, D., and MacQueen, P. 2014, White paper for “A Strategy to Optimize the U.S. Optical and Infrared System in the Era of the Large Synoptic Survey Telescope,” Board on Physics and Astronomy, National Research Council

“Community Access to the GMT in the Era of the LSST,” Freedman, W. L., Moses, E., Alcock, C., Armandroff, T., Colless, M., Couch, W., DePoy, D., Franzen, R., Hicke, L., Jannuzi, B., Kirshner, R., Mulchaey, J., Newton, J., Park, B.-G., Scott, M., Yuk, I. 2014, White paper for “A Strategy to Optimize the U.S. Optical and Infrared System in the Era of the Large Synoptic Survey Telescope,” Board on Physics and Astronomy, National Research Council

“New Developments in Instrumentation at the W. M. Keck Observatory,” Adkins, S. M., Armandroff, T. E., Fitzgerald, M., Johnson, J., Larkin, J. E., Lewis, H., Martin, C., Matthews, K. Y., Prochaska, X., and Wizinowich, P. 2014, in *Ground-based and Airborne Instrumentation for Astronomy V*, SPIE Proceedings vol. 9147, ed. S. K. Ramsay, I. S. McLean, and H. Takami (SPIE, Bellingham), p. 914703-13

“Advances in Instrumentation at the W. M. Keck Observatory,” Adkins, S. M., Armandroff, T. E., Johnson, J., Lewis, H., Martin, C., McLean, I. S., and Wizinowich, P. 2012, in *Ground-based and Airborne Instrumentation for Astronomy IV*, SPIE Proceedings vol. 8446, ed. I. S. McLean, S. K. Ramsay, and H. Takami (SPIE, Bellingham), p. 844603-1

“Advances in Instrumentation at the W. M. Keck Observatory,” Adkins, S. M., Armandroff, T., Lewis, H., Martin, C., McLean, I. S., Rockosi, C., and Wizinowich, P. 2010, in *Ground-based and Airborne Instrumentation for Astronomy III*, SPIE Proceedings vol. 7735, ed. I. S. McLean, S. K. Ramsay, and H. Takami (SPIE, Bellingham), p. 773502

“The Role of the W. M. Keck Observatory in U.S. Astronomy,” Armandroff, T. 2009, *Astro2010: The Astronomy and Astrophysics Decadal Survey*, Position Papers

“Conceptual Design for a High-Resolution Infrared Spectrograph for the 8-m Gemini Telescopes,” Hinkle, K. H., Eikenberry, S., Joyce, R., Liang, M., Muller, G., Hileman, E., French, J., Ge, J., Packham, C., Julian, R., Armandroff, T., Gaughan, N., Sprayberry, D., 2006, in *Ground-based and Airborne Instrumentation for Astronomy*, SPIE Proceedings vol. 6269, ed. I. S. McLean and M. Iye (SPIE, Bellingham), p. 117

- “Surface Photometry of Star Clusters in the Dwarf Elliptical Galaxies NGC 185 and NGC 205,” Kim, S. C., Lee, M. G., Geisler, D., Sarajedini, A., Armandroff, T. E., and Da Costa, G. S., 2002 in *Extragalactic Star Clusters*, IAU Symposium No. 207, ed. D. Geisler et al. (ASP, San Francisco), p. 174
- “Imaging Performance of the Mini-Mosaic Camera at the WIYN Telescope,” Saha, A., Armandroff, T., Sawyer, D., and Corson, C., 2000, in *Optical and IR Telescope Instrumentation and Detectors*, SPIE Proceedings vol. 4008, ed. M. Iye and A. Moorwood (SPIE, Bellingham), p. 447
- “CCD Detector Performance for NOAO’s Wide-Field Mosaic Cameras,” Wolfe, T., Armandroff, T., Blouke, M., Rector, T., Reed, R., Saha, A., Schommer, R., Smith, C., Smith, R., and Walker, A. 2000, in *Sensors and Camera Systems for Scientific, Industrial, and Digital Photography Applications*, SPIE Proceedings vol. 3965, ed. M. Blouke et al. (SPIE, Bellingham), p. 80
- “HST Color-Magnitude Diagrams of Globular Clusters in NGC 185 and NGC 205,” Geisler, D., Armandroff, T., Da Costa, G., Lee, M. G., and Sarajedini, A., 1999, in *The Stellar Content of Local Group Galaxies*, IAU Symposium No. 192, ed. P. Whitelock and R. Cannon (ASP, San Francisco), p. 231
- “A New Wide-Field Corrector for the Kitt Peak Mayall 4-m Telescope,” Jacoby, G. H., Liang, M., Vaughnn, D., Reed, R., and Armandroff, T., 1998, in *Optical Astronomical Instrumentation*, SPIE Proceedings vol. 3355, ed. S. D’Odorico (SPIE, Bellingham), p. 721
- “CCD Detector Upgrade for NOAO’s 8192 by 8192 MOSAIC,” Wolfe, T., Reed, R., Blouke, M., Boroson, T., Armandroff, T., and Jacoby, G., 1998, in *Optical Astronomical Instrumentation*, SPIE Proceedings vol. 3355, ed. S. D’Odorico (SPIE, Bellingham), p. 487
- “What is better than an 8192 X 8192 CCD Mosaic Imager? Two Mosaic Wide Field Imagers, one for KPNO and one for CTIO,” Muller, G. P., Reed, R., Armandroff, T., Boroson, T. and Jacoby, G., 1998, in *Optical Astronomical Instrumentation*, SPIE Proceedings vol. 3355, ed. S. D’Odorico (SPIE, Bellingham), p. 577
- “The Frequency of Binary Stars Near the Turnoff in the Globular Cluster M71,” Barden, S. C., Armandroff, T. E., and Pryor, C. P., 1996, in *The Origins, Evolution and Destinies of Binary Stars in Clusters*, ed. E. F. Milone and J.-C. Mermilliod (ASP, San Francisco), p. 89
- “The Performance of the WIYN Fiber-fed MOS System—Hydra,” Barden, S. C., and Armandroff, T., 1995, in *Fiber Optics in Astronomical Applications*, SPIE Proceedings vol. 2476, ed. S. Barden (SPIE, Bellingham), p. 56
- “Modifying Hydra for the WIYN Telescope—An Optimum Telescope, Fiber MOS Combination,” Barden, S. C., Armandroff, T., Muller, G., Rudeen, A. C., Lewis, J., and Groves, L., 1994, in *Instrumentation in Astronomy VIII*, SPIE Proceedings vol. 2198, ed. D. L. Crawford and E. R. Craine (SPIE, Bellingham), p. 87
- “Observational Performance of Fiber Optics—High Precision Sky Subtraction and Radial Velocities,” Barden, S., Elston, R., Armandroff, T., and Pryor, C., 1993, in *Fiber Optics in Astronomy II*, ed. P. M. Gray (ASP, San Francisco), p. 223
- “Hydra—Kitt Peak Multi-Object Spectroscopic System,” Barden, S., Armandroff, T., Massey, P., Groves, L., Rudeen, A., Vaughnn, D., and Muller, G., 1993, in *Fiber Optics in Astronomy II*, ed. P. M. Gray (ASP, San Francisco), p. 185
- “Summary Talk: What is Happening to Massive Stars in Galaxies?,” Graham, J. A., and Armandroff, T. E., 1986, in *Luminous Stars and Associations in Galaxies*, IAU Symposium No. 116, ed. C. W. H. de Loore et al. (Reidel, Dordrecht), p. 523

“Wolf-Rayet Stars in M31’s OB Associations,” Armandroff, T. E., Massey, P., and Conti, P. S., 1986, in *Luminous Stars and Associations in Galaxies*, IAU Symposium No. 116, ed. C. W. H. de Loore et al. (Reidel, Dordrecht), p. 239

“The Effect of Changes in the Stellar Luminosity Function on Problems in Galactic Structure,” Armandroff, T. E., 1983, in *The Nearby Stars and the Stellar Luminosity Function*, IAU Colloquium No. 76, ed. A. G. D. Philip and A. R. Uggren (Davis, Schenectady), p. 229