

Timothy A. McKay

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Education

1992 Ph.D., The University of Chicago, Chicago, IL.
1986 B.S., *Summa cum laude*, Temple University, Philadelphia, PA.

Professional Experience

2008- Director of the LSA Honors Program, University of Michigan
2007- Arthur F. Thurnau Professor of Physics and Professor of Astronomy
2005-2007 Arthur F. Thurnau Professor of Physics and Associate Professor of Astronomy
2004-2007 Associate Chair for the Undergraduate Program, Department of Physics
2001-2007 Associate Professor, Department of Physics, University of Michigan
1995-2001 Assistant Professor, Department of Physics, University of Michigan
1992-1995 Leon Lederman Fellow, Fermi National Accelerator Laboratory

National Professional Memberships, Awards and Honors

2010- Member, Sigma Xi Scientific Research Society
2002 Amoco Undergraduate Teaching Award
2001 Class of 1923 Memorial Teaching Award
2000 LSA Excellence in Education Award
1999 LSA Excellence in Education Award
1999 LSA Excellence in Research Award
1998 LSA Excellence in Education Award
1997 Presidential Early Career Award in Science and Engineering
1993- Member, American Astronomical Society
1992 Leon Lederman Fellowship, Fermi National Accelerator Laboratory
1992 David Grainger Graduate Fellow
1991 First Annual Nathan Sugarman Award for Excellence in Research,
Enrico Fermi Institute
1989- Member, American Physical Society
1986 Phi Beta Kappa, Temple University

Department, College, and University Service and Committees Since 2008

2010-2011 Director of the LSA Honors Program
UM STRIDE Committee Member
SACUA Academic Affairs Advisory Committee
Phi Beta Kappa, UM Chapter President
Promotion review committee for Jens-Christian Meiners
Faculty Review Committee for the President's Interdisciplinary Faculty Initiative
Member of major review committee for Andrew Tomasch
2009-2010 Director of the LSA Honors Program
Undergraduate Science Building Governing Board
Provost's Council on Student Honors
LSA Science Scholarship Committee
Phi Beta Kappa, UM Chapter President

2008-2009 Museum Studies Program Steering Committee
 Preparing Future Faculty seminar series planning panel
 SACUA Academic Affairs Advisory Committee
 Director of the LSA Honors Program
 Undergraduate Science Building Governing Board
 Provost's Council on Student Honors
 LSA Science Scholarship Committee
 Phi Beta Kappa, UM Chapter President
 Museum Studies Program Steering Committee
 Office of International Programs' Executive Committee
 Preparing Future Faculty seminar series planning panel
 LSA/SOE IDEA Institute Advisory Panel

Research Interests and Expertise

I pursue astrophysics research in two broad areas: the measurement of cosmic structure and variable phenomena. At present my two primary research tools are the Sloan Digital Sky Survey and the Robotic Optical Transient Search Experiment. I am also working to measure the expansion history of the Universe as a member of the Dark Energy Survey (DES) project team.

National Service Since 2006

2011 Member of the external review panel for the UCLA Honors Program
 2011 Co-organizer of a AAS national meeting special session: "Cluster Cosmology with Optical and SZ data"
 2009 Co-I of an NSF funded workshop on "Introductory Physics for the Life Sciences" at George Washington University
 2009- Member of the Dark Energy Survey Publications Board
 2007- Co-leader of the Dark Energy Survey Galaxy Cluster Science Working Group and Project Science Committee
 2007 Organizer of AAS national meeting special session: "Optical Cluster Finding: SDSS, RCS, and DEEP".
 2007 Organizer of 2007 Aspen Winter Conference "Clusters of galaxies as cosmological probes"
 2007 Member of the External Review panel for the Kavli Institute for Particle Astrophysics and Cosmology at Stanford and SLAC
 2006 Organizer of MCTP workshop "Galaxy Cluster Cosmology with Optical and Sunyaev-Zeldovich Surveys"
 2006- Member of the Advisory Committee for the New Faculty Teaching Workshop sponsored by the AAPT, APS, and AAS

Sponsored Research

Educause	2011 Next Generation Learning Challenge: \$249,035 grant for Intro Physics computer tailoring (PI with Strecher and Saunders from CHCR)
Whitaker Stage II	2011 Teaching: \$14,920 for intro reform assessment extension (Co-I w/Evrard, Gerdes, and Krisch)
Whitaker Stage I	2010 Teaching: \$14,580 for assessment of intro reforms (PI with Co-I's Gerdes and Evrard)
DOE	2010 DES/JDEM: 1 year award \$433,000 (Co-I w/Tarle, Gerdes, Lorenzon)
NSF	2009 Teaching: IPLS conference grant \$31,465 (Co-I through GWU)
DOE	2009 DES/JDEM: 1 year award \$407,000 (Co-I w/Tarle, Gerdes, Lorenzon)
IDEA Institute	2009 Teaching: 1 year \$35,000 for Physics for the Life Sciences
LSAIT	2008 Teaching: 1 year \$5000 award for grade prediction project
NASA	2008 ROTSE: 1 year award \$200,000 (Co-I with PI Akerlof)
NSF	2008 ROTSE: 3 year award \$364,993 (Co-I with PI Akerlof)

DOE	2008 DES/SNAP: 1 year award \$349,000 (Co-I w/Tarle & Gerdes)
NSF	2008 SDSS: 3 year award \$378,072 (PI)
NSF	2007 REU supplement to 2004 ROTSE grant: \$11,520 (PI)
DOE	2007 DES/SNAP: 1 year award \$345,000 (Co-I w/Tarle & Gerdes)
Teaching w/Technology	2007 Teaching: 1 year \$8,800 award for developing Physics 135
Whitaker Stage II	2006 Teaching: 1 year award of \$15,000 for E&M lab development
Teaching w/Technology	2006 Teaching: 1 year \$5,000 award for developing Physics 135
DOE	2006 DES/SNAP: 1 year \$411,000 (Co-I w/Tarle & Gerdes)
Whitaker Stage I	2005 Teaching: 1 year award of \$10,000 for E&M lab development
NSF	2005 REU: 3 year \$288,000 award for UM REU (PI, with co-I Meiners)
DOE	2005 DES/SNAP: 1 year award \$345,000 (Co-I w/Tarle & Gerdes)
NSF	2004 ROTSE: 3 year award \$306,846 total (PI, with co-I Carl Akerlof)
NSF	2004 REU: Supplement to 2002 SDSS grant \$9,600
DOE	2004 SNAP: 1 year award \$561,207 (Co-I with PI Tarle and Gerdes)
NASA	2003 ROTSE: 3 year award \$650,000 total (Co-I with PI Carl Akerlof)
DOE	2003 SNAP: 1 year award \$270,000 (Co-I with PI Greg Tarle)
DOE	2002 SNAP: 1 year award \$230,000 (Co-I with PI Greg Tarle)
NSF	2002 SDSS: 3 year award \$335,000 total (PI with co-I Gus Evrard)
NASA	2002 ROTSE: 1 year award, \$200,000 (Co-I with PI Carl Akerlof)
NASA	2000 ROTSE: 3 year award, \$1,340,000 total (Co-I with PI Carl Akerlof)
Whitaker Grant	1999 Teaching: 1 year award, \$5,000 + \$50,000 stage II grant (PI)
NSF	1999 ROTSE: 3 year award, \$360,000 (Co-I with PI Carl Akerlof)
PECASE Award	1997 SDSS: Increased Career award to 5 years and \$500,000 (PI)
NSF Career	1997 SDSS: 5 year award, \$404,000 total (PI)
Sloan Digital Sky Survey	1995 SDSS: 5 year award, ~\$400,000 total (PI)

Pending Proposals

DOE	2011 DES/BigBOSS 3 year proposal ~\$1.25M (Co-I w/Tarle, Gerdes, Lorenzon, and Evrard)
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Post-doctoral Associates

2010-	Brian Nord: DES/SPT (with Jeff McMahon)
2010-	Jeeseon Song (with the DES group)
2009-	Joerg Dietrich: SDSS
2005-2007	Eli Rykoff: ROTSE (with Carl Akerlof, now Project Scientist at LBNL)
2004-2007	Sarah Yost: ROTSE (with Carl Akerlof, now a faculty member at St. Benedict's)
2000-2004	Don Smith: ROTSE (with Carl Akerlof, now a faculty member at Guilford College)
2002-2003	Risa Wechsler: SDSS (with Gus Evrard, now a faculty member at Stanford Univ.)
1997-2000	Robert Kehoe: ROTSE (with Carl Akerlof, now a faculty member at SMU)
1996-2000	J. Allyn Smith: SDSS (now a faculty member at Austin Peay University)
1999	Philippe Fischer: SDSS (now "Analytics" group manager with ScotiBank, Canada)

Patents

High resolution biomedical imaging system with direct detection of X-rays via a charge coupled device, with M. Atac, Fermilab, (issued, April 21, 1998).

Authored Books

Physics for the Life Sciences, San Francisco, Pearson Addison Wesley, under contract, to be published Fall 2012

Edited Books

Wide Field Imaging from Space, McKay, T., Linder, E., and Fruchter, A., ed., published as a special issue of New Astronomy Reviews, Elsevier Press, 2005

Journal Publications

- 1: Miller, E., *et al.*, 2011, “Finding Fossil Groups: Optical Identification and Chandra Confirmation”, submitted to The Astrophysical Journal.
- 2: Rykoff, E., *et al.*, 2011, “Robust Optical Richness Estimation with Reduced Scatter”, submitted to The Astrophysical Journal.
- 3: Hao, J., *et al.*, 2010, “Intrinsic Alignment of Cluster Galaxies: the Redshift Evolution”, submitted to The Astrophysical Journal.
- 4: Akerlof, C., *et al.*, 2010, “Searching for Needles in Haystacks – Using the Fermi/GBM to find GRB γ -rays with the Fermi/LAT Detector”, The Astrophysical Journal, 726, 22.
- 5: Hao, J., *et al.*, 2010, “A GMBCG Galaxy Cluster catalog of 55,424 Rich Clusters from SDSS DR7”, The Astrophysical Journal: Supplement Series, **191**, 254.
- 6: Akerlof, C., *et al.*, 2010, “Searching for Needles in Haystacks - Looking for GRB γ -rays with the Fermi/LAT Detector”, The Astrophysical Journal, 725L, 15.
- 7: Rossi, A., *et al.*, 2010, “The Swift/Fermi GRB 080928 from 1 eV to 150 keV”, submitted to Astronomy and Astrophysics.
- 8: Niederste-Ostholt, M., *et al.*, 2010, “Alignment of Brightest Cluster Galaxies with their Host Clusters”, Monthly Notices of the Royal Astronomical Society, **405**, 2023.
- 9: Yuan, F., *et al.*, 2010, “The Exceptionally Luminous Type-Ia Supernova 2007IF”, The Astrophysical Journal, **715**, 1338.
- 10: Pandey, S.B., *et al.*, 2009, “GRB 090902b: Afterglow Observations and Implications”, The Astrophysical Journal, **714**, 799.
- 11: Gerdes, D., *et al.*, 2009, “ARBORZ: Photometric Redshifts for Galaxies Using Boosted Decision Trees”, The Astrophysical Journal, **715**, 823.
- 12: Percival, W., *et al.*, 2009, “Baryon Acoustic Oscillations in the Sloan Digital Sky Survey Data Release 7 Galaxy Sample”, Monthly Notices of the Royal Astronomical Society, **401**, 2148.
- 13: Reid, B., *et al.*, 2009, “Cosmological Constraints from the Clustering of the Sloan Digital Sky Survey DR7 Luminous Red Galaxies”, Monthly Notices of the Royal Astronomical Society, **404**, 60.
- 14: Hao, J., *et al.*, 2009, “Precision Measurements of the Cluster Red Sequence using an Error Corrected Gaussian Mixture Model”, The Astrophysical Journal, **702**, 745.
- 15: Rykoff, E., *et al.*, 2009, “Looking into the Fireball: ROTSE-III and Swift Observations of Early GRB Afterglows”, The Astrophysical Journal, **702**, 489.
- 16: Rozo, E., *et al.*, 2009, “Cosmological Constraints from the SDSS maxBCG Cluster Catalog”, The Astrophysical Journal, **708**, 645.
- 17: Abazajian, K., *et al.*, 2008, “The Seventh Data Release of the Sloan Digital Sky Survey”, The Astrophysical Journal Supplements Series, **182**, 543.
- 18: Perley, D., *et al.*, 2008, “GRB 071003: Broadband Follow-up Observations of a Very Bright Gamma-Ray Burst in a Galactic Halo”, The Astrophysical Journal, **688**, 470.
- 19: Rozo, E., *et al.*, 2008, “Improvement of the Richness Estimates of maxBCG Clusters”, The Astrophysical Journal, **703** 601.
- 20: Rozo, E., *et al.*, 2008, “Constraining the Scatter in the Mass-Richness Relation of MaxBCG Clusters with Weak Lensing and X-Ray Data”, The Astrophysical Journal, **699**, 768.
- 21: Gezari, S., *et al.*, 2008, “Discovery of the Ultra-Bright Type II-L Supernova 2008es”, The Astronomical Journal, **690**, 1313.
- 22: Rykoff, E., *et al.*, 2008, “The L_x -M Relation of Clusters of Galaxies”, Monthly Notices of the Royal Astronomical Society, **287L**, 28.
- 23: Rykoff, E., *et al.*, 2007, “Measuring the Mean and Scatter of the X-ray Luminosity – Optical Richness Relation for maxBCG Galaxy Clusters”, The Astrophysical Journal, **675** 1106.
- 24: Sheldon, E., *et al.*, 2009, “Cross-Correlation Weak Lensing of SDSS Galaxy Clusters III: Mass-to-Light Ratios”, The Astrophysical Journal, **703**, 2232.
- 25: Johnston, D., *et al.*, 2007, “Cross-Correlation Weak Lensing of SDSS Galaxy Clusters II: Cluster Density Profiles and the Mass-Richness Relation”, submitted to The Astrophysical Journal, also arXiv:0709.1159.
- 26: Adelman-McCarthy, J., *et al.*, 2007, “The Sixth Data Release of the Sloan Digital Sky Survey”, The Astrophysical Journal Supplements Series, **175**, 297.

- 27: Yost, S., *et al.*, 2007, “The Dark Side of ROTSE-III Prompt GRB Observations”, The Astrophysical Journal, **669**, 1107.
- 28: Ruiz-Velasco, A.E., *et al.*, 2007, “Detection of GRB060927 at $z = 5.47$: Implications for the Use of Gamma-Ray Bursts as Probes of the End of the Dark Ages”, The Astrophysical Journal, **669**, 1.
- 29: Becker, M., *et al.* 2007, “The Mean and Scatter of the Velocity Dispersion-Optical Richness Relation for maxBCG Galaxy Clusters”, The Astrophysical Journal, **669**, 905.
- 30: Rozo, E., *et al.*, 2007, “Optically-Selected Cluster Catalogs as a Precision Cosmology Tool”, submitted to The Astrophysical Journal, also astro-ph/0703574.
- 31: Rozo, E., *et al.*, 2007, “Cosmological Constraints from the MaxBCG Cluster Abundances”, submitted to The Astrophysical Journal, also astro-ph/0703571.
- 32: Adelman-McCarthy, J., *et al.*, 2007, “The Fifth Data Release of the Sloan Digital Sky Survey”, The Astrophysical Journal Supplements Series, **172**, 634.
- 33: Koester, B., *et al.*, 2007, “A MaxBCG Catalog of 13,823 Galaxy Clusters from the Sloan Digital Sky Survey”, The Astrophysical Journal, **660**, 239.
- 34: Koester, B., *et al.*, 2007, “MaxBCG: A Red Sequence Galaxy Cluster Finder”, The Astrophysical Journal, **660**, 221.
- 35: Yost, S., *et al.*, 2007, “Exploring Broadband GRB Behavior During gamma-ray Emission”, The Astrophysical Journal, **657**, 925.
- 36: Sheldon, E., *et al.*, 2009, “Cross-Correlation Weak Lensing of SDSS Galaxy Clusters I: Lensing Profiles”, The Astrophysical Journal, **703**, 2217.
- 37: Yost, S., *et al.*, 2006, “Status of the ROTSE-III telescope network”, Astronomische Nachrichten, **327**, 803.
- 38: Tucker, D., *et al.*, 2006, “The Sloan Digital Sky Survey Monitor Telescope Pipeline”, Astronomische Nachrichten, **327**, 821.
- 39: Kinemuchi, K., Smith, H., Wozniak, P., and McKay, T., 2006, “Analysis of RR Lyrae Stars in the Northern Sky Variability Survey”, The Astronomical Journal, **132**, 1202.
- 40: Quimby, R., *et al.*, 2006, “Early-Time Observations of the GRB 050319 Optical Transient”, The Astrophysical Journal, **640**, 402.
- 41: Rykoff, E., *et al.*, 2006, “The Anomalous Early Afterglow of GRB 050801”, The Astrophysical Journal Letters, **638**, 5.
- 42: Adelman-McCarthy, J., *et al.*, 2005, “The Fourth Data Release of the Sloan Digital Sky Survey”, The Astrophysical Journal Supplements Series, **162**, 38.
- 43: Gettel, S., Geske, M., and McKay, T., 2006, “A Catalog of 1022 Bright Contact Binary Stars”, The Astronomical Journal, **131**, 621.
- 44: Geske, M., Gettel, S., and McKay, T., 2006, “X-ray Emission from Contact Binary Stars”, The Astronomical Journal, **131**, 633.
- 45: Yost, S., *et al.*, 2006, “Optical Light Curve and Cooling Break of GRB050502a”, The Astrophysical Journal, **636**, 959.
- 46: Johnston, D., *et al.*, 2005, “Cross-correlation lensing: Determining Density and Mass Profiles from Stacked Weak Lensing Shear Measurements”, The Astrophysical Journal, **562**, 27.
- 47: Rykoff, E., *et al.*, 2005, “A Search for Untriggered GRB Afterglows with ROTSE-III”, The Astrophysical Journal, **631**, 1032 .
- 48: Rykoff, E., *et al.*, 2005, “Prompt Optical Detection of GRB 050401 with ROTSE-IIIa”, The Astrophysical Journal Letters, **621**, 121.
- 49: Miller, C., *et al.*, 2005, “The C4 Clustering Algorithm: Clusters of Galaxies in the Sloan Digital Sky Survey”, The Astronomical Journal, **130**, 968.
- 50: Abazajian, K., *et al.*, 2005, “The Third Data Release of the Sloan Digital Sky Survey”, The Astronomical Journal, **129**, 1755.
- 51: Hansen, S., McKay, T., Wechsler, R., Annis, J., Sheldon, E., & Kimball, A., 2005, “Measurement of Galaxy Cluster Sizes, Radial Profiles, and Luminosity Functions from SDSS Photometric Data”, The Astrophysical Journal, **633**, 122.
- 52: Eisenstein, D., *et al.*, 2005, “Detection of the Baryon Acoustic Peak in the Large-Scale Correlation Function of SDSS Luminous Red Galaxies”, The Astrophysical Journal, **633**, 560.
- 53: Rykoff, E., *et al.*, 2004, “Discovery of CVs ROTSE3 J151453.6+020934.2 and ROTSE3 J221519.8-003257.2”, Informational Bulletin of Variable Stars, **5559**, 1.

- 54: Aldering, G., *et al.*, 2004, "Supernova / Acceleration Probe: A Satellite Experiment to Study the Nature of the Dark Energy", submitted to the Proceedings of the Astronomical Society of the Pacific.
- 55: Abazajian, K., *et al.*, 2004, "The Second Data Release of the Sloan Digital Sky Survey", The Astronomical Journal, **128**, 502.
- 56: Kelly, B., and McKay, T., 2004, "Morphological Classification of Galaxies by Shapelet Decomposition in the Sloan Digital Sky Survey II: Multiwavelength Classification", The Astronomical Journal, **129**, 1287.
- 57: Tegmark, M., *et al.*, 2004, "Cosmological parameters from SDSS and WMAP", Physical Review D, **69**, id 103501.
- 58: Wozniak, P., *et al.*, 2004, "The Northern Sky Variability Survey (NSVS): Public Data Release", The Astronomical Journal, **127**, 2436.
- 59: Sheldon, E., *et al.*, 2004, "The Galaxy-Mass Correlation Function Measured from Weak Lensing in the SDSS", The Astronomical Journal, **127**, 2544.
- 60: Rykoff, E., *et al.*, 2003, "The Early Optical Afterglow of GRB030418 and Progenitor Mass Loss", Astrophysical Journal, **601**, 1013.
- 61: Smith, D., *et al.*, 2003, "ROTSE-III Observations of the Early Afterglow From GRB 030329", Astrophysical Journal Letters, **596L**, 151.
- 62: Inada, N., *et al.*, 2003, "A Gravitationally Lensed Quasar With Quadruple Images Separated by 14.62 Arcseconds", Nature, **426**, 810.
- 63: Kelly, B., and McKay, T., 2003, "Morphological Classification of Galaxies by Shapelet Decomposition in the Sloan Digital Sky Survey", Astronomical Journal, **127**, 625.
- 64: Hogg, D., *et al.*, 2003, "The dependence on environment of the color--magnitude relation of galaxies", Astrophysical Journal Letters, **601L**, 29.
- 65: Abazajian, K., *et al.*, 2003, "The First Data Release of the Sloan Digital Sky Survey", Astronomical Journal, **126**, 2081.
- 66: Rhodes, J., *et al.*, 2003, "Weak Lensing from Space I: Prospects for The Supernova/Acceleration Probe", Astroparticle Physics, **20**, 377.
- 67: Massey, R., *et al.*, 2003, "Weak Lensing from Space II: Dark Matter Mapping", Astronomical Journal, **127**, 3102.
- 68: Refregier, A., *et al.*, 2003, "Weak Lensing from Space III: Cosmological Parameters", Astronomical Journal, **127**, 3089.
- 69: Tegmark, M., *et al.*, 2004, "The 3D Power Spectrum of Galaxies from the Sloan Digital Sky Survey", The Astrophysical Journal, **606**, 702.
- 70: Lee, B., *et al.*, 2003, "A Catalog of Compact Groups of Galaxies in the SDSS Commissioning Data", Astronomical Journal, **127**, 1811.
- 71: Bahcall, N., McKay, T., *et al.*, 2003, "A Merged Catalog of Clusters of Galaxies from Early SDSS Data", Astrophysical Journal Supplements, **148**, 243.
- 72: Prada, F., *et al.*, 2003, "Observing the dark matter density profile of isolated galaxies", Astrophysical Journal, **598**, 260.
- 73: Akerlof, C., *et al.*, 2003, "The ROTSE-III Robotic Telescope System", Proceedings of the Astronomical Society of the Pacific, **115**, 132.
- 74: Bernardi, M., *et al.*, 2003, "Early-type galaxies in the SDSS I: The Sample", Astronomical Journal, **125**, 1817.
- 75: Bernardi, M., *et al.*, 2003, "Early-type galaxies in the SDSS II: Correlations Between Observables", Astronomical Journal, **125**, 1849.
- 76: Bernardi, M., *et al.*, 2003, "Early-type galaxies in the SDSS III: The Fundamental Plane", Astronomical Journal, **125**, 1866.
- 77: Bernardi, M., *et al.*, 2003, "Early-type galaxies in the SDSS IV: Colors and Chemical Evolution", Astronomical Journal, **125**, 1882.
- 78: McKay, T., 2002, "When Light Goes Astray: Gravitational Lensing in Astrophysics", Contemporary Physics, **43**, 451.
- 79: Bahcall, N., *et al.*, 2003, "The Cluster Mass Function from Early SDSS Data: Cosmological Implications", Astrophysical Journal, **585**, 182.
- 80: Goto, T., *et al.*, 2003, "The Morphological Butcher-Oemler effect in the SDSS Cut & Enhance Galaxy Cluster Catalog", Proceedings of the Astronomical Society of Japan, **55**, 739.

- 81: Goto, T., *et al.*, 2002, "Composite Luminosity Functions of the Sloan Digital Sky Survey Cut & Enhance Galaxy Cluster Catalog", Proceedings of the Astronomical Society of Japan, **54**, 515.
- 82: Kehoe, R., *et al.*, 2002, "An Untriggered Search for Optical Bursts", Astrophysical Journal, **577**, 845.
- 83: Szapudi, I., *et al.*, 2002, "Higher Order Moments of the Angular Distribution of Galaxies from Early Sloan Digital Sky Survey Data", Astrophysical Journal, **75**, 570.
- 84: Smith, D.A., *et al.*, 2002, "Discovery of the CV ROTSE3 J015118.59-022300.1", Informational Bulletin on Variable Stars, **5226**, 1.
- 85: Stoughton, C., *et al.*, 2002, "Sloan Digital Sky Survey: Early Data Release", Astronomical Journal, **123**, 485.
- 86: McKay, T., *et al.*, 2002, "Dynamical Confirmation of SDSS Weak Lensing Scaling Laws", Astrophysical Journal Letters, **571L**, 85.
- 87: VandenBerk, D., *et al.*, 2001, "SDSS J124602.54+011318.8: A Highly Luminous Optical Transient at $z=0.385$ ", Astronomical Journal, **576**, 673.
- 88: Amrose, S., and McKay, T., 2001, "RR Lyrae Local Space Density inferred from the ROTSE-I Variable Survey", Astrophysical Journal Letters, **560**, 151.
- 89: Becker, R., *et al.*, 2001, "Evidence for Reionization at $z \approx 6$: Detection of a Gunn-Peterson Trough in a $z=6.28$ Quasar", Astronomical Journal, **122**, 2850.
- 90: Smith, J.A., *et al.*, 2002, "The u'g'r'i'z' Standard Star System", Astronomical Journal, **123**, 2121.
- 91: Connolly, A., *et al.*, 2002, "The Angular Correlation Function of Galaxies from Early SDSS Data", Astrophysical Journal, **579**, 42.
- 92: Wren, J., *et al.*, 2001, "Observations of the Optical Counterpart to XTE J1118+480 during Outburst by the Robotic Optical Transient Search Experiment I Telescope", Astrophysical Journal Letters, **557**, 97L.
- 93: Kehoe, R., *et al.*, 2001, "A Search for Early Optical Emission from Short- and Long-Duration Gamma-Ray Bursts", Astrophysical Journal Letters, **554**, 159.
- 94: Tegmark, M., *et al.*, 2002, "The Angular Power Spectrum of Galaxies from Early SDSS Data", Astrophysical Journal, **571**, 191.
- 95: Zehavi, I., *et al.*, 2002, "Galaxy Clustering in Early SDSS Redshift Data", Astrophysical Journal, **571**, 172.
- 96: Scranton, R., *et al.*, 2002, "Analysis of Systematic Effects and Statistical Uncertainties in Angular Clustering of Galaxies from Early SDSS Data", Astrophysical Journal, **579**, 48.
- 97: Ivezić, Z., *et al.*, 2001, "Solar System Objects Observed in the Sloan Digital Sky Survey Commissioning Data", Astronomical Journal **122**, 2749.
- 98: Anderson, S., *et al.*, 2001, "High-Redshift Quasars Found in Sloan Digital Sky Survey Commissioning Data VI", Astronomical Journal **122**, 503.
- 99: Strateva, I., *et al.*, 2001, "Color Separation of Galaxy Types in Sloan Digital Sky Survey Imaging Data", Astronomical Journal, **122**, 1861.
- 100: Yasuda, N., *et al.*, 2001, "Galaxy Number Counts from the Sloan Digital Sky Survey Commissioning Data", Astronomical Journal, **122**, 1104.
- 101: Blanton, M., *et al.*, 2001, "The Luminosity Function of Galaxies in SDSS Commissioning Data", Astronomical Journal, **121**, 2358.
- 102: Sheldon, E., McKay, T., *et al.*, 2001, "Weak Lensing Measurements of 42 SDSS/RASS Galaxy Clusters", Astrophysical Journal Letters, **554**, 881.
- 103: Richards, G., *et al.*, 2001, "Colors of 2625 Quasars at $0 < z < 5$ Measured in the Sloan Digital Sky Survey Photometric System", Astronomical Journal, **121**, 2308.
- 104: Fan, X., *et al.*, 2001, "High-Redshift Quasars Found in Sloan Digital Sky Survey Commissioning Data. IV: Luminosity Function from the Fall Equatorial Stripe Sample" Astronomical Journal, **121**, 54.
- 105: Fan, X., *et al.*, 2001, "High-Redshift Quasars Found in Sloan Digital Sky Survey Commissioning Data. III: A Color-selected Sample at $I^* < 20$ in the Fall Equatorial Stripe", Astronomical Journal, **121**, 31.
- 106: Finlator, K., *et al.*, 2000, "Optical and Infrared Colors of Stars Observed by 2MASS and SDSS", Astronomical Journal, **120**, 2615.
- 107: Fan, X., *et al.*, 2000, "Discovery of a Luminous $z=5.80$ Quasar from the Sloan Digital Sky Survey", Astronomical Journal **120**, 1167.
- 108: York, D., *et al.*, 2000, "The Sloan Digital Sky Survey: Technical Summary", Astronomical Journal, **120**, 1579.

- 109: Akerlof, C., et al., 2000, "Rapid Followup Observations of SGR Events with ROTSE-I", *Astrophysical Journal*, **542**, 251.
- 110: Ivezić, Z., et al. 2000, "Candidate RR Lyrae Stars Found in Sloan Digital Sky Survey Commissioning Data", *Astronomical Journal*, **120**, 963.
- 111: Akerlof, C., et al., 2000, "Prompt Optical Observations of Gamma-ray Bursts", *Astrophysical Journal*, **532**, 25L.
- 112: Akerlof, C., et al., 2000, "ROTSE All Sky Surveys for Variable Stars I: Test Fields", *Astronomical Journal*, **119**, 1901.
- 113: Fan, X., et al., 2000, "L Dwarfs Found in Sloan Digital Sky Survey Commissioning Imaging Data", *Astronomical Journal*, **119**, 928.
- 114: Joffré, M., et al., 2000, "Weak Gravitational Lensing by the Nearby Cluster A3667", *Astrophysical Journal Letters*, **534**, 131L.
- 115: Fischer, P., McKay, T., Sheldon, E., *et al.*, 2000, "Weak Lensing with SDSS Commissioning Data: The Galaxy-Mass Correlation Function to $1 \text{ h}^{-1} \text{ Mpc}$ ", *Astronomical Journal* **120**, 1198.
- 116: Sowards-Emmerd, D., Smith, J.A., McKay, T.A., and Sheldon, E., 2000, "SDSS photometry of 2000 LCRS galaxies", *Astronomical Journal*, **119**, 2598.
- 117: Zinn, J., et al., 1999, "Coordinated Observations of Two Large Leonid Fireballs over Northern New Mexico, and Computer Model Comparisons", *Meteoritics and Planetary Science*, **34**, 1007.
- 118: Fan, X., et al., 1999, "High-Redshift Quasars Found in Sloan Digital Sky Survey Commissioning Data. II: The Spring Equatorial Stripe", *Astronomical Journal*, **119**, 1.
- 119: Akerlof, C., *et al.*, 1999, "Detection of Contemporaneous Optical Emission from a Gamma-Ray Burst", *Nature*, **398**, 400.
- 120: Bloom, J., *et al.*, 1999, "The Host Galaxy of GRB990123", *Astrophysical Journal*, **518**, L1.
- 121: Fan, X., *et al.*, 1999, "High Redshift Quasars Found in Sloan Digital Sky Survey Commissioning Data", *Astronomical Journal*, **118**, 1
- 122: Richards, G. *et al.*, 1997, "Quasar Photometry with the SDSS Monitor Telescope". *Publications of the Astronomical Society of the Pacific*, **109**, 39.
- 123: Borione, A., *et al.*, 1994, "Observation of the Shadows of the Sun and Moon Using 100 TeV Cosmic Rays", *Physical Review D*, **49**, 1171.
- 124: McKay, T., *et al.*, 1993, "A Northern Sky Survey for Astrophysical Point Sources of 100 TeV Gamma Radiation", *Astrophysical Journal*, **417**, 742.
- 125: Cronin, J., *et al.*, 1992, "Search for Discrete Sources of 100 TeV Gamma Radiation", *Physical Review D*, **45**, 4385.
- 126: Lynn, K.G., McKay, T., & Nielson, B., 1987, "Trapping of Non-thermal Positrons in Metals", *Physical Review B*, **36**, 7107.

Non-technical publications

- 2011 Podcast on "Individualized computerized coaching for science classes" for UM News and Information Services
- 2010 Featured in a new 'Campus Day' video for LSA Media, shown to all prospective students
- 2010 "Focus on the Faculty" online video for the Michigan iTunes-U channel
- 2010 "Physics for Future Physicians and Life Scientists: a Moment of Opportunity", APS News Back Page article (with Amador-Kane, Crouch, Reeves, and Hilborn), March 2010
- 2010 "The Expanding Universe", online video for Michigan Today, January 2010
- 2009 "A different kind of energy savings", online video for Michigan Today, September 2009
- 2008 "Go with the flow: Physics and the Energy Crisis", Michigan Today, July 2008
- 2008 "Pools of Life", Michigan Today, January, 2008
- 2007 "When do we know that we know?", Michigan Today, September, 2007

Guest Lectures

- 2011 Ohio Section of the APS Annual Meeting: Invited talk on "Forming Structures in an Expanding Universe"
- 2011 Michigan State University: Invited talk on the ECoach system
- 2011 University of Illinois, Invited seminar on "Physics for the Life Sciences at Michigan"

- 2010 AAPT/APS New Faculty Workshop Reunion, Workshop Leader on "Introductory Physics for the Life Sciences"
- 2010 McGill University, Invited Colloquium on "Galaxy Clusters and Accelerated Expansion"
- 2010 University of Michigan, Invited 'Michigan Seminar' titled "Four Hundred Years of Cosmic Discovery" for visiting University donors
- 2010 Sigma Xi University of Michigan Chapter Annual Meeting, Invited Guest Speaker
- 2010 Detroit Ophthalmology Club, Invited talk on "The Expanding Universe"
- 2010 Wright State University, Invited Colloquium on "Galaxy Clusters and the Accelerating Expansion of the Universe".
- 2009 AAPT Summer Meeting, Ann Arbor, Invited presentation on "Physics for the Life Sciences: What's happening at Michigan".
- 2009 Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, Invited, internet streamed public lecture on "Measuring Dark Energy with Galaxy Clusters"
- 2009 University of Arizona, Invited Colloquium on "Cosmology with Optically Selected Galaxy Clusters"
- 2009 Saturday Morning Physics on "Four-Hundred Years of Cosmic Discovery: Celebrating the International Year of Astronomy"
- 2008 International Conference on Classification and Discovery in Large Astronomical Surveys, Invited plenary presentation on "Identifying Galaxy Clusters", Ringberg Castle, Germany
- 2008 Observatorio Nacional de Brazil, Invited Colloquium on "Cosmology with 10,000 Optically Selected Galaxy Clusters"
- 2008 Brazilian National Meeting on Elementary Particles and Fields, Invited Plenary Presentation on "Dark Energy Experiments"
- 2007 "Cosmic Cartography" conference at the Kavli Institute for Cosmological Physics: review talk on "The Dark Energy Survey"
- 2007 "MaxBCG Galaxy Clusters": Invited presentation at the Fall 2007 SDSS collaboration meeting
- 2007 Michigan State University: Invited Colloquium "Cosmology with Optically Selected Galaxy Clusters"
- 2007 Pennsylvania State University: Invited Colloquium "Cosmology with Optically Selected Galaxy Clusters"
- 2007 Fermilab: Invited Presentation to the Annual FNAL Users Meeting: "Dark Energy Experiments: DES and Beyond"
- 2007 New York University: Invited Colloquium "Cosmology with Optically Selected Clusters of Galaxies; a Progress Report"
- 2006 Muskegon Community College: Public Lecture on the Big Bang
- 2006 Camp Michigania East: Alumni Lectures on the Big Bang and the Arrow of Time in Physics
- 2006 University of California San Diego Department of Physics: Invited Colloquium
- 2006 University of Michigan Museum Studies Program: Led conversation on "Museums and Science" with Rob Semper, Director of the Exploratorium
- 2005 Enrico Fermi Institute Minisymposium "Cosmology with Clusters of Galaxies", Invited Plenary Talk on "Optical Cluster Measurements: Observational Limitations and Opportunities"
- 2005 Saturday Morning Physics: "How We Know the Big Bang Really Happened"
- 2005 Plenary presentation on "Comparing Theory to Observation in SDSS Galaxy Clusters" at Kona Conference on "The Future of Cosmology with Galaxy Clusters"
- 2005 Plenary presentation on "Weak Lensing and Galaxy Dynamics in Groups and Clusters" at Ohio Center for Theoretical Science Workshop "Gravitational Lensing, Dark Matter, and Dark Energy"
- 2004 Fundamental Physics from Galaxy Clusters: Fermilab Center for Particle Astrophysics, Invited plenary talk on "Galaxy Clusters in the SDSS"
- 2004 University of Kansas: Physics and Astronomy Colloquium, "Galaxies and Dark Matter Halos in the SDSS"
- 2004 Ohio State University: Astronomy Colloquium, "Galaxies and Halos in the SDSS"
- 2004 Notre Dame University: Astrophysics Seminar, "Galaxies and Dark Matter Halos in the SDSS"

2003 Hebrew University, Jerusalem, Invited talk at Galaxy Evolution Workshop
 2003 Waterloo University: Invited Colloquium on "Galaxies and Halos in the SDSS"
 2003 Saturday Morning Physics: "The Arrow of Time in Physics"
 2003 California Institute of Technology: Physics Colloquium: "Exploring the Dark Universe"
 2003 University of Michigan, Invited Seminar on "The Sloan Digital Sky Survey: What happens when you create a spacetime?"
 2003 201st American Astronomical Society Meeting: Invited Presentation on "SNAP Deep Surveys"
 2002 Fermilab: Invited colloquium for 'Thursdays with the Stars' series "The Sloan Digital Sky Survey"
 2002 Goddard Space Flight Center: Invited Colloquium "Measuring the Evolution of Cosmic Expansion with SNAP"
 2002 World Space Congress/COSPAR meeting: Invited presentation on "The Supernova / Acceleration Probe"
 2002 University of Arizona: Invited Colloquium on "Dark Matter Halos and Galaxies"
 2002 Cosmo-02 Conference in Chicago: Invited Speaker on "Observational probes of Dark Energy"
 2002 12th Annual Maryland Astrophysics Conference: Invited Speaker on "Dark Matter Halos and Galaxies in the SDSS"
 2002 International Conference on Galaxy Evolution, Cozumel, Mexico: Invited Speaker
 2002 SDSS Collaboration Meeting, Heidelberg Germany: Invited Speaker
 2002 MIT Department of Physics: Invited Colloquium "Galaxies and Mass in the SDSS"
 2002 University of New Mexico Department of Physics and Astronomy: Invited Colloquium "Galaxies and Mass in the SDSS"
 2002 Enrico Fermi Institute, University of Chicago: Invited presentation for SDSS mini-symposium
 2002 UCLA Department of Astronomy: Invited Colloquium "Galaxies and Mass in the SDSS"
 2002 Princeton University Department of Astrophysical Sciences: Invited Colloquium "Galaxies and Mass in the SDSS"
 2002 Center for Cosmological Physics: Invited Seminar "Galaxies and Mass in the SDSS"
 2001 DOE High Energy Physics Advisory Panel: Invited presentation on Astro/Cosmo/Particle physics at Snowmass
 2001 Snowmass Meeting on the Future of High Energy Physics: Invited Plenary Review of Astro/Cosmo/Particle Physics sessions
 2001 Yale Cosmology Workshop: Invited Review "Recent Results on SDSS Galaxy-galaxy Lensing"
 2001 Fermilab CDM Halo meeting
 2001 American Physical Society April Meeting
 2001 Fermi National Accelerator Laboratory: Invited Colloquium "Unveiling the Relation Between Luminous and Dark Matter: Weak Lensing in the SDSS"
 2000 Case Western Reserve University: Invited Colloquium "Unveiling the Relation Between Luminous and Dark Matter: Weak Lensing in the SDSS"
 2000 Wayne State University: Invited Colloquium "Unveiling the relation between Luminous and Dark Matter: Weak Lensing in the SDSS"
 2000 SLAC Summer Institute: Invited Review "First Results from the SDSS"
 2000 ESO/MPIE Munich Joint Astronomy Invited Colloquium: "SDSS Weak Lensing Results"
 2000 Max Planck Institute for Astronomy, Heidelberg: Invited colloquium "New SDSS Weak Lensing Results"
 2000 University of Chicago: Invited colloquium "Weak Lensing in the SDSS: Probing the Relation Between Luminous and Dark Matter"
 2000 University of Maryland: Invited colloquium "Weak Lensing in the SDSS: Probing the Relation between Luminous and Dark Matter"
 2000 9th Marcel Grossmann meeting, Rome: Invited review of GRB studies
 1999 Fermi National Accelerator Laboratory: Invited colloquium on "Discovery of the Optical Burst from GRB990123"
 1999 Penn State: Invited colloquium on the SDSS

- 1999 Michigan State University: Invited colloquium on "Detection of Optical Emission from GRB990123; the Most Luminous Object Ever Observed"
- 1999 Fermilab Inner Space/Outer Space conference: Invited review on "Optical Studies of Gamma-Ray Bursts"
- 1999 Physics in Collision Conference, Ann Arbor: Invited review on "Gamma-Ray Bursts: An Overview of Recent Observational Progress"
- 1999 Argonne National Lab: Invited colloquium on "Optical Studies of Gamma-Ray Bursts; a Bright Future"
- 1999 University of Michigan Department of Astronomy: Invited colloquium on "ROTSE: Recent Results and Plans for the Future"
- 1998 Los Alamos National Lab: Invited seminar on the SDSS
- 1998 Summer AAPT Meeting: Invited review on Gravitational Lensing
- 1997 International Conference on Optical Counterparts of Gamma-ray Bursts, Elba, Italy
- 1997 University of Toronto Department of Astronomy: Invited SDSS colloquium
- 1996 International Astrophysical Union Meeting 179: Invited review "Digital Sky Surveys"

Dissertation Committees

<i>Name</i>	<i>Dept.</i>	<i>Candidacy</i>	<i>Degree</i>	<i>Chair</i>
Yuanyuan Zhang	Physics	NA	PhD	McKay
Grant Meadors	Physics	Summer 2010	PhD	Riles
Jeff Myers	Physics	Fall 2007	*PhD	Ogilvie
Jennifer Blum	Astronomy	Fall 2008	*PhD	Miller
Jason Gilbert	AOSS	Fall 2007	*Ph.D.	Zurbuchen
Fang Yuan	Physics	Fall 2007	*PhD	Akerlof
Jana Grcevich	Astronomy	Fall 2007	Ph.D.	Putman
Vladimir Dergachev	Physics	Fall 2006	*PhD	Riles
Junyi Zhang	Physics	Winter 2008	Ph.D.	Riles
Thomas Brink	Astronomy	Fall 2006	Ph.D.	Mateo
Evan Goetz	Physics	Fall 2006	*Ph.D.	Riles
Jiangang Hao	Physics	Summer 2006	*Ph.D.	McKay
Eva-Marie Proszkow	Physics	Summer 2006	*Ph.D.	Adams
Brooks Thomas	Physics	Fall 2005	*Ph.D.	Wells
Manavendra Mahato	Physics	Spring 2005	*Ph.D.	Pando-Zayas
David Chin	Physics	Winter 2001	*Ph.D.	Riles
Maritza Tavaréz	Astronomy	Fall 2001	*Ph.D.	Mateo
Rebecca Stanek	Astronomy	Fall 2004	*Ph.D.	Evrard
Bo Jayalitaka	Physics	Spring 2004	*Ph.D.	Gerdes
Michael Busha	Physics	Spring 2004	*Ph.D.	Evrard
Heather Swan	Physics	Winter 2004	*Ph.D.	Akerlof
Ben Koester	Physics	Fall 2003	*Ph.D.	McKay
Kelly Korreck	AOSS/Physics	Fall 2003	*Ph.D.	Gombosi
K. McKinstry	Astronomy	Winter 2003	*Ph.D.	Mateo
Monique Aller	Astronomy	Winter 2003	*Ph.D.	Richstone
Eric Miller	Astronomy	Winter 2002	*Ph.D.	Bregman
Alex Athey	Astronomy	Winter 2002	*Ph.D.	Bregman
Mike Jarvis	Astronomy	Summer 2001	*Ph.D.	Bernstein
Kris Chiboucas	Astronomy	Summer 2001	*Ph.D.	Mateo
Eli Rykoff	Physics	Winter 2001	*Ph.D.	Akerlof
Carrie Swift	Astronomy	Summer 2002	*Ph.D.	Hughes
Alicia Reinart	AOSS	Spring 2002	*Ph.D.	Fisk
Erin Sheldon	Physics	Winter 2001	*Ph.D.	McKay
Brian Lee	Physics	Fall 1999	*Ph.D.	Akerlof
Joao da Costa	Physics	Winter 1999	*Ph.D.	Gerdes
Ben Matheisen	Physics	Winter 1998	*Ph.D.	Evrard
Shelley Lemley	Astronomy	Winter 1997	*Ph.D.	MacAlpine

Teaching

W11	Physics 235 Physics for the Life Sciences II: (308 students: with Greg Tarle)
F10	Physics 135 Physics for the Life Sciences I: (384 students: with Andrew Tomasch)
W10	Physics 235 Physics for the Life Sciences II: Discussion (154 students)
F09	Administrative leave
W09	Physics 235 Physics for the Life Sciences II (132 students)
F08	Physics 135 Physics for the Life Sciences I (108 students)
W08	Physics 235 Physics for the Life Sciences II (118 students)
F07	Physics 135 Physics for the Life Science I (85 students)
W07	Physics 235 Physics for the Life Sciences II (36 students)
F06	Physics 135 Physics for the Life Sciences I (36 students)
W06	Administrative leave
F05	Physics 240 Engineering Introductory E&M (580 students)
W05	Physics 260 Honors Introductory E&M (35 Students)
F 04	Physics 140 Engineering Introductory Mechanics (450 students)
W 04	Physics 390 Introduction of Modern Physics (45 students)
F 03	Physics 240 Engineering Introductory E&M (500 students)
W 03	Physics 126 Pre-med Introductory E&M (270 students)
F 02	Physics 160 Honors Introductory Physics (35 students)
W02	Sabbatical
F01	Sabbatical
W 01	Physics 125 Pre-med Introductory Physics (320 students)
F 00	Physics 160 Honors Introductory Physics (33 Students)
W 00	Physics 125 Pre-med Introductory Physics (320 students)
F 99	Physics 390 Introduction to Modern Physics (14 students)
W 99	Physics 125 Pre-med Introductory Physics (320 students)
F 98	Physics 160 Honors Introductory Physics (34 students)
W 98	Physics 125 Pre-med Introductory Physics (320 students)
F 97	Physics 340 Thermodynamics, Waves, and Relativity (20 students)
W 97	Physics 160 Honors Introductory Physics (17 students)
F 96	Physics 160 Honors Introductory Physics (25 students)
F 95	Physics 140 Engineering Introductory Physics: Recitations (100 students)

Undergraduate Independent Study Students

REU	S11	Corbin Taylor
415	S11	Neal Anderson
415	W11	Yusuke Yagi, Kate Miller
IndStu	W11	Madeline Huberth, Blythe Moreland, Alex Nguyen, Kate Miller
IndStu	F10	Madeline Huberth, Blythe Moreland, Alex Nguyen, Kate Miller
REU	S10	Blythe Moreland, Mallory Fuhst
IndStu	S10	Kate Miller, Alex Nguyen
IndStu	W10	Madeline Huberth, Blythe Moreland, Shiwei Zhou, David Chapel
UROP	W10	Nathan Daly, Karl Werner
IndStu	F09	Madeline Huberth, Blythe Moreland, Shiwei Zhou, David Chapel, Rachel Severin
UROP	F09	Nathan Daly, Karl Werner
IndStu	S09	Madeline Huberth, Blythe Moreland, Seth Siegel, Lo-Hua Yuan, James Jonna
499	W09	Seth Siegel
UROP	W09	James Leonard, Alex Nguyen
UROP	F08	James Leonard, Alex Nguyen
IndStu	F08	Rachel Severin
498	F08	Seth Siegel

IndStu	S08	Seth Siegel, Rachel Severin, Lisa Carpenter
415	W08	Seth Siegel, Dan Hanselman
IndStu	F07/W08	Wai-ling Wu
415	F07	Seth Siegel, Matthew Geramita
REU	S07	Paige Warmker, Aaron Fenyes
IndStu	S07	Matthew Becker, Zili Huang, Lisa Carpenter, Matthew Geramita
IndStu	W07	Matthew Becker, Aaron Fenyes
415	W07	Michelle Fritz
IndStu	F06	Matthew Becker, Wai-ling Wu, Aaron Fenyes, Paige Warmker
IndStu	S06	Matthew Becker, Wai-ling Wu, Sara Gettel, Aaron Fenyes, Erin McCamish
REU	S06	Paige Warmker, Laura Spencer
IndStu	W06	Matthew Becker, Wai-ling Wu, Paige Warmker, Sara Gettel, Matthew Geske
415	W06	Erin McCamish, Brad Baden
IndStu	F05	Matthew Becker, Kate Green, Wai-ling Wu, Paige Warmker, Catherine Herzog
496	F05	Sara Gettel, Matthew Geske
415	F05	Meredith Danowski
REU	S05	Meredith Danowski, Sara Gettel, Matthew Geske, Genevieve Shattow
IndStu	S05	Matthew Becker, Wai-ling Wu, Lindsey Bleem, Katherine Alatalo
415	W05	Matthew Becker, Sara Gettel
IndStu	F04/W05	Sara Gettel, Matthew Geske, Meredith Danowski, Kate Green,
UROP	F04/W05	Catherine Herzog
REU	S04	Lindsey Bleem, Sara Gettel, Matthew Geske, Kelly Edwards, Kate Green
IndStu	W04	Erwin Lau, Sara Gettel, Matthew Geske, Tim Chambers
IndStu	F03	Erwin Lau
REU	S03	Erwin Lau
UROP	S03	Lhea Copeland
IndStu	S03	Brandon Kelly, Amy Kimball, Judith Racusin, Meredith Danowski
IndStu	W03	Meredith Danowski, Erwin Lau
UROP	W03	Liz Haney, Lhea Copeland
415	F02	Lin Li
UROP	F02	Liz Haney
REU	S02	Brandon Kelly, Amy Kimball, Josh Schroeder, Judith Racusin
415	W02	Judith Racusin
GE	F01/W02	Judith Racusin, Sarah Hansen
UROP	F01/W02	Ashley Dutton, Adam Brezhinski
Ind.	F01/W02	Amy Kimball
REU	S01	Amy Kimball, Daniel Grin
UROP	F00/W01	Kari Nordgren, Sara Haack
GE	F00/W01	Judith Racusin, Sarah Hansen
415	F00	Nir Krakaur
REU	S00	Alison Kandzer
444	W00	Justin Schafer, Martin Centurion
GE	W00	Sarah Monk, Judith Racusin
444	W99	David Sowards-Emmerd
MSGC	S99	Susan Amrose
REU	S99	Justin Schafer, Andrew Waltman, Martin Centurion, Elizabeth Luszcek
444	F99	Justin Schafer, Martin Centurion
MSGC	F99	Susan Amrose
UROP	F99	Judith Racusin
GE	F99	Sarah Monk
UROP	F98	Yamina Acebo, Sarah Monk
	S97	Dave Johnston, Susan Amrose, Yamina Acebo, Dan Kocevski
444	F97	Dan Kocevski, Susan Amrose
GE	F97	Yamina Acebo

444	F96	David Johnston
415	F96	Ian Freedman
REU	S96	Roy Kilgard, David Johnston, Ian Freedman
415	W96	Ian Freedman

Honors Senior Thesis Students

F11	Madeline Huberth: “ <i>The Impact of Aural Feedback on the Quality of Cello Performance</i> ”
W11	Alex Nguyen: “ <i>Observing Filament Galaxy Populations using SDSS Galaxy Cluster Pairs</i> ”
W11	Kate Miller: “ <i>Gender Matters: Assessing and Addressing the Persistent Gender Gap in Physics Education</i> ” (Virginia Voss Writing Award, Cornwell Prize)
W09	Seth Seigel: “ <i>Galaxy Cluster Detection and Measurement with Joint SZ and Optical Data</i> ” (Cornwell Prize)
W08	Wai-Ling Wu: “ <i>Radio Sources in maxBCG Galaxy Clusters</i> ”
W07	Matthew Becker, “ <i>Galaxy Dynamics in maxBCG Galaxy Clusters</i> ” (Williams Prize, APS Apker Prize)
W06	Matthew Geske, “ <i>X-ray Emission from Contact Binary Stars</i> ”
W06	Sarah Gettel, “ <i>A Catalog of 1022 Bright Contact Binary Stars</i> ”
W04	Erwin Lau, “ <i>Velocity Structure in SDSS Clusters</i> ”
W03	Amy Kimball, “ <i>Statistical Studies of Galaxy Clustering in the SDSS</i> ” (Williams Prize Runner-up)
W03	Brandon Kelly, “ <i>Morphological Classification of Galaxies by Shapelet Decomposition in the Sloan Digital Sky Survey</i> ” (Williams Prize)
W02	Sarah Hansen, “ <i>Properties of SDSS Galaxy Clusters</i> ” (Virginia Voss Writing Award)
W00	Susan Amrose, “ <i>RR Lyrae Variable Stars Discovered by ROTSE</i> ” (Williams Prize)
W00	Martin Centurion, “ <i>Measuring Halo Flattening with Weak Gravitational Lensing</i> ”
W00	Justin Schafer, “ <i>W Ursae Majoris Stars in the ROTSE-I Variable Star Survey</i> ”
W99	David Sowards-Emmerd, “ <i>Photometric Redshifts in the Sloan Colors</i> ” (Williams Prize)
W96	David Johnston, “ <i>Measuring the Gravitational Lensing Mass of the Coma Cluster</i> ”