

## **AUGUST E. (Gus) EVRARD**

Arthur F. Thurnau Professor of Physics and Astronomy  
University of Michigan  
450 Church St.  
Ann Arbor, MI 48109-1040 USA  
Phone: +1 (734) 764-4366  
e-mail: [evrard@umich.edu](mailto:evrard@umich.edu)

### **Education**

1981 B. A., Physics, University of Pennsylvania  
1986 Ph. D., Physics, State University of New York at Stony Brook

### **Career/Experience**

1986 Postdoctoral Fellow, Department of Astrophysical Sciences, Princeton University, (June to Sep.)  
1986-88 NATO Fellow and SERC Fellow, Institute of Astronomy, University of Cambridge, UK  
1988-90 Miller Research Fellow, Astronomy Department, University of California, Berkeley  
1990-96 Assistant Professor of Physics, University of Michigan  
1995 Visiting Research Physicist, Institute for Theoretical Physics, UCSB (Spring term)  
1996-2001 Associate Professor of Physics, University of Michigan  
1996-97 MENESR Senior Scientist Fellow, Institut d'Astrophysique, Paris  
1997 Visiting Research Scientist, Max-Planck-Institut für Astrophysik, Garching (Feb.)  
1997 Visiting Research Scientist, Physics Department, Durham University (July-Aug.)  
1999 Visiting Research Physicist, Institute for Theoretical Physics, UCSB (Feb./Mar.)  
2000-01 Associate Professor of Astronomy, University of Michigan  
2001 Scientific Visitor, Carnegie Observatories, Pasadena (May/June)  
2001- Professor of Physics and Astronomy, University of Michigan  
2004 Visiting Research Physicist, Institute for Theoretical Physics, UCSB (Oct.)  
2005 Japan Society for Promotion of Science (JSPS) Visiting Fellow, Tokyo University (Apr.)  
2006 Miller Visiting Professor, Physics Department, University of California, Berkeley (Jan.-May)  
2008-10 Associate Director for Budget, Michigan Center for Theoretical Physics  
2009- Arthur F. Thurnau Professor of Physics and Astronomy, University of Michigan

- 2010- Assoc. Chair, Undergraduate Program, Physics Department, University of Michigan
- 2012- (under negotiaton) Faculty Director of Academic Engagement, Office of Research Cyberinfrastructure, University of Michigan

**National/Professional Memberships, Service, Awards and Honors**

- 1981 William E. Stevens Memorial Prize for Physics, U. of Pennsylvania
- 1981-84 Graduate Council Fellowship, SUNY--Stony Brook
- 1986- Member, American Astronomical Society
- 1986 NATO Fellowship
- 1987- Member, Royal Astronomical Society
- 1988 Miller Research Fellowship, UC, Berkeley
- 1990 NASA Long Term Space Astrophysics Program review panel
- 1992 NATO International Travel Grant
- 1992-93 Co-organizer, First Annual Great Lakes Cosmology Workshop, Ann Arbor
- 1993 Scientific Organizing Committee, XXIXth Rencontres de Moriond
- 1994 Scientific Organizing Committee, Aspen Summer Workshop
- 1994 NASA Long Term Space Astrophysics Program review panel
- 1996 Scientific Organizing Committee, NMSU Meeting "Clusters of Galaxies at Different Redshifts"
- 1996 MENESR Senior Scientist Fellow, France
- 1997 Scientific Organizing Committee, "Untangling Coma Berenices", Marseilles, France
- 1997 NASA Astrophysics Theory Program review panel
- 1997-2002 CINECA Supercomputer Time Allocation Committee (Italy)
- 1998 Scientific Organizing Committee, "Galaxies at Different Redshifts", NMSU
- 1998 NSF Astronomy Division CAREER Program review panel
- 1999 NASA Chandra Fellowship review panel
- 1999 Scientific Organizing Committee, "Large-Scale Structure in the X--ray Universe", Santorini, Greece
- 1999 Consultant, National Geographic Society "Millennium in Maps" Series
- 1999-2000 Advisor, National Air and Space Museum, "Explore the Universe" Gallery
- 2000 Scientific Organizing Committee, "Constructing the Universe with Clusters of Galaxies", Paris
- 2001 Scientific Organizing Committee, "Soft and Hard Excesses in the Intergalactic Medium: Observations, Theory and Modeling", Catania.
- 2001 NASA Chandra AO-3 review panel chair
- 2001 Scientific Visitor Program Participant, Carnegie Observatories
- 2002-08 Science Working Group, National Virtual Observatory
- 2002 Scientific Organizing Committee, "Testing Cosmological Models with Galaxy Clusters", Ringberg, Germany

2003 Principal Organizer, "Great Lakes Cosmology VII", Ann Arbor  
 2003 Scientific Organizing Committee, "Cosmology and Astrophysics with Galaxy Clusters", Aspen, CO  
 2003 Scientific Organizing Committee, "Cosmology with Sunyaev-Zel'dovich Surveys", Center for Cosmological Physics, Chicago  
 2003 NASA Astrophysics Theory Program review panel chair  
 2004 NASA Chandra Fellowship review panel chair  
 2004 Scientific Organizing Committee, COSPAR meeting on "Clusters of Galaxies: New Insights from XMM-Newton, Chandra and INTEGRAL", Paris  
 2004 Scientific Organizing Committee, "Fundamental Physics with Clusters of Galaxies", Fermilab Center for Particle Astrophysics, Batavia, IL  
 2005 Principal Organizer, "The Future of Cosmology with Clusters of Galaxies", Kona, HI  
 2006 Scientific Organizing Committee, XXVIth Astrophysics Moriond Meeting, "From Dark Halos to Light", La Thuile, Italy  
 2006 Co-organizer, MCTP Workshop, "Galaxy Cluster Cosmology with Optical and Sunyaev-Zel'dovich Surveys", Ann Arbor  
 2006 Miller Visiting Professor, University of California, Berkeley  
 2007- Co-leader, Simulation Working Group, Dark Energy Survey  
 2008 Session Organizer, 24th Texas Symposium on Relativistic Astrophysics "Texas in Vancouver", Vancouver, Canada  
 2008 Panel Member, DoE Workshop, "Scientific Challenges for Understanding the Quantum Universe and the Role of Computing at Extreme Scale"  
 2009 Scientific Organizing Committee, ESO Workshop: Galaxy Clusters in the Early Universe, Pucón, Chile  
 2009 NASA Chandra AO-10 review panel chair  
 2009 NSF Astronomical Sciences review panel chair  
 2010 NASA Postdoctoral Program Review  
 2010 co-Organizer, MCTP Workshop, "The Physics of Cool Cores in Galaxy Clusters: Theory and Computation", Ann Arbor, MI  
 2010 Scientific Adviser, KITP Workshop, "Galaxy Clusters: The Crossroads of Astrophysics and Cosmology", UCSB  
 2011 Scientific Organizing Committee, "SZ/X-ray Clusters and Cosmology", Huntsville, AL  
 2011 NSF Computational and Grid Physics Program review panel  
 2011 Co-organizer, "Large Data Sets in Astrophysics and Cosmology", Park City, UT  
 2011 Scientific Organizing Committee, "Mapping the Structure of the Energetic Universe", Garmisch-Partenkirchen, Germany  
 2012 Fellow, American Physical Society

## University of Michigan Service, Awards and Honors

1991	Rackham Faculty Research Grant
1992	CRLT Postdoctoral Teaching Award
1995-96	Selection Committee, The Ralph Baldwin Prize in Astrophysics and Space Science
1995-98	ITIC-Virtual Reality Faculty Advisory Committee
1997-2002	LSA Information Technology Faculty Advisory Committee
2000-02	Executive Committee, UM Center for Parallel Computing
2000-02	Chair, LSA Information Technology Committee
2002-04	Chair, LSA/MAIS Pilot User Group, M-Pathways Data Mining
2004-05	Astronomy Department Extragalactic Faculty Search Committee
2005	Steering Committee, LSA Research Theme Semester, "Data Dilemmas"
2005-07	CRLT Advisory Board
2005-12	Rackham Student Mentor, Taeyjuana Curry
2005-08	Chair, LSA Instructional Technology Committee
2007-10	LSA Academic Computing Infrastructure Committee
2007-	University of Michigan Science Library Committee
2008-10	Associate Director for Budget, Michigan Center for Theoretical Physics
2008	Search Committee, UM3D Lab Director, Duderstadt Center
2008	Provost Special Committee On Institutional Innovation In Collaborative Technologies for Learning
2008-10	University of Michigan Business Intelligence Council of Experts
2009-11	University of Michigan MERLOT Community of Practice
2009-10	CRLT Colloquium on the Science of Learning
2009-	Arthur F. Thurnau Professor, University of Michigan
2009-12	University of Michigan Library Council Member (SACUA appointment)
2010	Thurnau Professorship Selection Committee
2011	Faculty panel, Newnan Advising Summit on Quantitative Reasoning

## Physics Department Service and Committees

1991-92	Astrophysics Search Committee
1991-93	Astrophysics Institute Committee
1991-92	Organized Discussion Group on Cosmological Structure Formation (W 91)
1991-92	Organized Joint Physics--Astronomy Journal Club (F 91)
1991-92	Organized Astrophysics Seminar Series
1992-94	Physics Department Computing Committee member
1992-96	Selection Committee Member, Ralph M. Bodine Scholarship
1994-95	Faculty Mentor, UM Mentorship Program
1994-96	Chair, Physics Department Computing Committee
1997-98	Physics Department Colloquium Committee
1997-98	Co-Chair, Physics Department Computing Committee
1998-00	Chair, Physics Department Computing Committee
1999	Search Committee, Instructional Technology Programmer

1999-04	Instructional Technology Oversight Team (ITOT)
2000-02	Editorial and WWW Committee
2001-06	Computing Committee, Michigan Center for Theoretical Physics
2000	Chair, Astrophysics Search Committee
2001-03	Physics Department Executive Committee
2002	Astrophysics Search Committee
2003-04	Physics Department Admissions and Fellowships Committee
2003-04	Physics Department Awards Committee
2003-05	Michigan Center for Theoretical Physics Executive Committee
2004-05	Introductory Physics Oversight Committee
2004-05	Leff Assistant Professor Search Committee
2004-05	Mentor to Dave Winn (Lecturer II)
2004-05	Cornwell Prize Committee
2005-06	Introductory Physics Committee
2005-07	Physics Department Computing Committee
2006-07	Editorial Advisory Board and Web Page Committee
2006-07	Faculty Search Committee
2006-07	Financial Reporting Committee
2007-08	Physics Concentration Counselor
2007-08	Introductory Physics Committee
2007-08	Graduate Admissions China Interviewer
2007-09	Michigan Center for Theoretical Physics Executive Committee
2007-09	Physics Department Executive Committee
2007-12	Faculty Mentor, Asst. Prof. Dragan Huterer
2008-09	Physics Department Computing Committee
2009	Chair, 3 <sup>rd</sup> year Review Committee of Asst. Prof. Dragan Huterer
2010-	Associate Chair, Undergraduate Program
2011	Chair, Tenure Review Committee of Asst. Prof. Dragan Huterer

### **Current or Pending Sponsored Research Support**

NASA Astrophysics Theory Program, \$348,000, Apr 2010–Mar 2013, “X-ray/Optical Studies of the Galaxy Cluster Population”.

Department of Energy, \$2,287,591, May 2012–Apr 2015, “Proposal to Study the Properties and Interactions of Elementary Particles FY 2012-2015” (co-PI with many co-I’s).

NSF TeraGrid, 2M SU allocation on TACC, Apr 2011-Apr 2012 (Co-PI with A. Kravtsov, U Chicago).

NSF, \$258,400, “REU Site: Summer Undergraduate Research Experience in Physics at the University of Michigan”, May 2010–Apr 2013.

UM Whitaker II Award, \$14,000, “Institutionalizing Assessment of Introductory

Physics Course Reforms”, Feb 2011–Jan 2013

(Pending) NSF, \$2,000,000 “The M-STEM Academies at the University of Michigan: An Integrated Approach to Increase the Number and Diversity of Undergraduates in STEM Disciplines”, Jul 2012–Jun 2017.

(Pending) NSF AST, \$485,502, “Multiwavelength Synthetic Skies for Galaxy Cluster Science”, May 2012–Apr 2015.

### **Prior Sponsored Research Support**

NSF TeraGrid, 1M SU allocation on TACC, Apr 2010-Mar 2011 (Co-PI with PI A. Kravtsov, U Chicago)

NSF Extragalactic and Cosmology Program, \$304,933, Aug 2007-Aug 2011, “From Theory to the Sky: Observable Features of Clusters of Galaxies”.

NSF Extragalactic and Cosmology Program, \$42,642, Aug 2009-Aug 2011, “From Theory to the Sky: Observable Features of Clusters of Galaxies”, supplement to above.

NASA Chandra Postdoctoral Fellowship Program, \$267,260, Oct 2006-Sep 2010, “Bringing Theory Closer to Observation: Mock X-ray Catalogues of Galaxy Clusters”

NASA, Astrophysics Theory Program, \$15,000, June 2007-June 2008, “Population Studies of Simulated Galaxy Clusters”

NASA, Astrophysics Theory Program, \$330,000, Apr 2003-Mar 2008, “Modeling of X-ray Clusters”

NASA HST Cycle 14, \$10,000, Aug 2005-Jul 2007, “On the Road to Coma: A "Longitudinal Study" of Galaxy Cluster Evolution”, (subcontract of \$94,000 grant to U Colorado, PI, E. Ellingson)

NSF ITR, \$258,261, Oct 2001 to Aug 2007, “Statistical Data Mining for Cosmology” (subcontract to \$3.5M grant to CMU, PI A. Moore)

NSF Extragalactic Astronomy and Cosmology Program, \$334,764, Sep 2002-Aug 2007, “Determining the Relation between Dark and Luminous Matter: Weak Lensing and N-body Simulation”, (PI: T. McKay)

NASA FUSE Guest Investigator Program Cycle 5, \$78,763, Jun 2004-Sep 2005, “Local Missing Baryons in the Cosmic Web”, (PI: R. Dupke, co-I J. Bregman, UM Astronomy)

HST Guest Observer Program Cycle 12, \$22,000 Feb 2004-Jun 2005, “A Search for Missing Baryons in the Cosmic Web”, (PI: R. Dupke, co-I J. Bregman, UM Astronomy)

LS&A Cost Sharing, \$20,000, “Determining the Relation between Dark and Luminous Matter: Weak Lensing and N-body Simulation”, (PI: T. McKay)

NASA Chandra Theory, \$88,826, Jan 2004-Dec 2005, “A Virtual Cluster Exploratory Year Two: Mock Observations of Simulated Galaxy Clusters”, (co-I’s M. Donahue, STScI; R. Dupke, UM Astronomy)

NSF Extragalactic and Cosmology Program, \$10,000, Feb 2005-Feb 2006, conference support for “The Future of Cosmology with Clusters of Galaxies”

NASA Chandra Theory, \$85,013, Jan-Dec 2003, “A Virtual Cluster Exploratory Prototype: Mock Observations of Simulated Galaxy Clusters”, (co-I’s M. Donahue, STScI; R. Dupke, UM Astronomy)

NASA, Astrophysics Theory Program, \$124,000, Apr 1999 to Mar 2003, “Modeling of X-ray Clusters”

NSF, Extragalactic Astronomy and Cosmology Program, \$191,000, Jul 1998 to Jun 2001, “Galaxy Formation in Groups and Clusters”, (co-I, C.S. Frenk, Durham Univ.).

NASA, Astrophysics Theory Program, \$25,000, April 1998 to Mar 1999, “Numerical Simulations of Groups and Clusters of Galaxies”.

LS&A, \$7400, in lieu of cost--sharing on above grant.

NASA, Astrophysics Data Program, \$125,300, Oct 1996 to Sep 1998, “Galaxy Cluster Dynamics and Evolution at the Current Epoch” (co-I, J. Mohr).

NASA, Astrophysics Theory Program, \$305,600, Jul 1994 to Aug 1997, “Gas Dynamic Simulations of Groups and Clusters of Galaxies”.

NATO, International Travel Grant, \$4700 (renewal), Aug 1994 to Aug 1996, “Formation and Evolution of Rich Clusters of Galaxies”. Co-I with C. Frenk, University of Durham, UK.

OVPR Discretionary Grant, \$15,000, Oct 1994 to Dec 1995, “Parallel P3MSPH : A Parallel Cosmological Gas Dynamics Code” (matched with \$8000 from Physics, LS&A and Center for Parallel Computing).

NASA, ASCA Guest Observer Program, \$70,000, Sep 1994 to Aug 1995, “The Cluster Mass Function and Baryon Fraction from a Complete X-ray Sample” (one of six Co-I's with PI J. Bregman, Astronomy).

NASA, ROSAT Guest Observer Program, \$29,000, Jan 1994 to Jan 1995, “X-ray Emission from Compact Groups of Galaxies”.

NATO, International Travel Grant, \$6300 (shared with co-I), Jul 1992 to Jul 1994, “Formation and Evolution of Rich Clusters of Galaxies”. Co-I with C. Frenk, Univ. of Durham, UK.

NASA, Astrophysics Theory Program, \$305,000, Feb 1991 to Jun 1994, “Hydrodynamic Simulations of the Intracluster Medium”.

NSF, San Diego Supercomputer Center, 600 Cray Y-MP hours, July 1993 to July 1994, “Large-Scale Structure in the Universe”. Co-I with Marc Davis and Frank Summers, UC Berkeley.

CRLT Postdoctoral Teaching Award, \$5000, Jan 1993 to May 1993, for development of new undergraduate course “Cosmology : The Science of the Universe”.

NSF, San Diego Supercomputer Center, 400 Cray Y-MP hours, July 1992 to July 1993, “Large-Scale Structure in the Universe”. Co-I with Marc Davis and Frank Summers, UC Berkeley.

UM, Rackham Faculty Grant, \$9,369, Jan 1992 to Dec 1993, “Diagnosing Cosmological Models with Rich Cluster of Galaxies”.

NASA, ROSAT Guest Observer Program, \$0 (\$19,781 to Co-I's), Jan 1992 to Jan 1993, “Are Large Core Radius Clusters Merged Systems?”. Co-I with W. Forman and C. Jones, SAO, Harvard.

### **Postdoctoral Associates**

1996-98	Joseph J. Mohr (currently Full Professor at U. Illinois)
2001-03	Risa Wechsler (currently Assistant Professor at U Chicago)
2006-09	Elena Rasia (Chandra Fellow, currently Michigan Society of Fellows Assistant Professor)

### **Other Formal Mentoring**

2004-05	David Winn (Physics Department Lecturer II)
2006-09	Taeyjuana Curry (Rackham Summer Institute)
2007-12	Dragan Huterer (Assistant Professor)



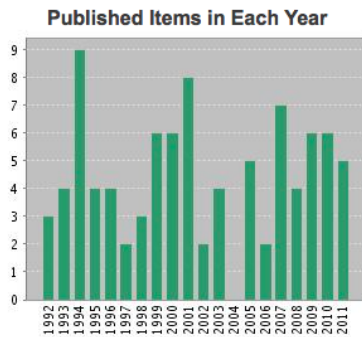
## Articles in Refereed Journals

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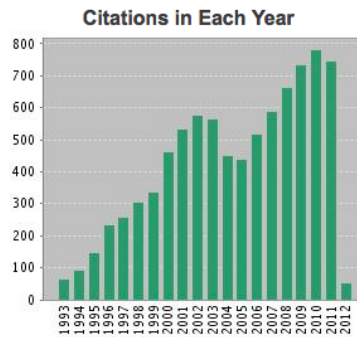
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1. Evrard, A.E. and Yahil, A., 1985, *Virialization in N-Body Models of the Expanding Universe: I. Isolated Pairs*, Astrophys J, 296, 299.
2. Evrard, A.E. and Yahil, A., 1985, *Virialization in N-Body Models of the Expanding Universe: II. All Pairs*, Astrophys J, 296, 310.
3. Evrard, A.E., 1986, *Large-Scale Clustering of Galaxies With Massive Dark Halos: I. General Structure, Two-Point Correlations, and Binaries*, Astrophys J, 310, 1.
4. Evrard, A.E., 1987, *Large-Scale Clustering of Galaxies With Massive Dark Halos: II Mass-To-Light Profiles and Dynamical Mass Estimates of Galaxy Groups*, Astrophys J, 316, 36.
5. Evrard, A.E., 1988, *Beyond N-Body: 3-D Cosmological Gas Dynamics*, Monthly Notices Royal Astron Soc, 235, 911.
6. Silk, J. and Evrard, A.E., 1988, *A Deep Look at Forming Galaxies*, Nature, 335, 766.
7. Evrard, A.E. and Davis, M., 1988 *The Fate of Cluster Gas in a Neutrino Dominated Cosmology*, Nature, 333, 335.
8. Evrard, A.E., 1989, *Testing Origins of the Hubble Sequence*, Astrophys J, 341, 26.
9. Evrard, A.E., 1989, *Biased CDM Theory : Trouble From Rich Clusters?*, Astrophys J, 341, L41.

10. Evrard, A.E., Silk, J. and Szalay, A.S., 1990, *The Morphology--Density Relation for Galaxies in a CDM Dominated Universe*, Astrophys J, 365, 13.
11. Evrard, A.E., 1990, *Formation and Evolution of X-Ray Clusters : A Hydrodynamic Simulation of the ICM*, Astrophys J, 363, 349.
12. Evrard, A.E. and Henry, J.P., 1991, *Expectations for X-Ray Cluster Observations by the Rosat Satellite*, Astrophys J, 383, 95.
13. Evrard, A.E., 1991, *Clues to Galaxy Activity From Rich Cluster Simulations*, Monthly Notices Royal Astron Soc, 248, 8.
14. Blanchard, A., Wachter, K., Evrard A. and Silk J., 1992, *The Contribution of Clusters to the X-Ray Background*, Astrophys J, 391, 1.
15. Evrard, A.E. and Crone, M.M., 1992, *Previrialization*, Astrophys J, 394, L1.
16. Feldman, H., and Evrard, A.E., 1993, *Structure in a Loitering Universe*, International Journal Of Modern Physics, 2, 113.
17. Tegmark, M., Silk, J., and Evrard, A., 1993, *Late Reionization by Supernova Driven Winds*, Astrophys J, 417, 54.
18. Evrard, A.E., Mohr, J.J., Fabricant, D.G., and Geller, M.J., 1993, *A Morphology-Cosmology Connection for X-Ray Clusters*, Astrophys J, 419, L9.
19. White, S.D.M., Navarro, J.F., Evrard, A.E., and Frenk, C.S., 1993, *The Baryon Content of Galaxy Clusters : A Challenge to Cosmological Orthodoxy*, Nature, 366, 429.
20. Evrard, A.E., Summers, F.J., and Davis, M., 1994, *Two-Fluid Simulations of Galaxy Formation*, Astrophys J, 422, 11.
21. Evrard, A., and Charlot, S., 1994, *Optical Signatures of High Redshift Galaxy Clusters*, Astrophys J, 424, L13.
22. Kang, H., Ostriker, J.P., Cen, R., Ryu, D., Hernquist, L., Evrard, A.E., Bryan, G.L., and Norman, M.L., 1994, *A Comparison of Cosmological Hydrodynamic Codes*, Astrophys J, 430, 83.
23. Evrard, A.E. and Kaiser, N., 1994, *A Sudden Squall in the Cosmos*, Nature, 368, 806.
24. Crone, M.M., Evrard, A.E., and Richstone, D., 1994, *The Cosmological Dependence of Cluster Density Profiles*, Astrophys J, 434, 564.

25. Metzler, C.A. and Evrard, A.E., 1994, *A Simulaton of the Intracluster Medium With Feedback From Cluster Galaxies*, Astrophys J, 437, 564.
26. Pildis, R.A., Bregman, J.N., and Evrard, A.E., 1995, *Rosat Observations of Compact Groups of Galaxies*, Astrophys J, 443, 514.
27. Mohr, J.J., Evrard, A.E., Fabricant, D.G., and Geller, M.J., 1995, *Cosmological Constraints From X-Ray Cluster Morphologies*, Astrophys J, 447, 8.
28. Summers, F.J., Davis, M., and Evrard, A.E., 1995, *Galaxy Tracers and Velocity Bias*, Astrophys J, 454, 1.
29. Pildis, R.A., Evrard, A.E., and Bregman, J.N., 1996, *Properties of Simulated Compact Groups of Galaxies*, Astron. J., 112, 378.
30. Crone, M.M., Evrard, A.E., and Richstone, D.O., 1996, *Substructure in Clusters as a Cosmological Test*, Astrophys J, 467, 489.
31. Evrard, A.E., Metzler, C.A., and Navarro, J.F., 1996, *Mass Estimates of X-Ray Clusters*, Astrophys J, 469, 494.
32. Frenk, C.S., Evrard, A.E., White, S.D.M., and Summers, F.J., 1996, *Galaxy Dynamics in Clusters*, Astrophys J, 472, 460.
33. Evrard, A.E., 1997, *The Intracluster Gas Fraction in X-Ray Clusters: Constraints on the Clustered Mass Density*, Monthly Notices Royal Astron Soc, 292, 289.
34. Mohr, J.J., and Evrard, A.E., 1997, *An X-Ray Size-Temperature Relation For Galaxy Clusters: Observation and Simulation*, Astrophys J, 491, 38.
35. Metzler, C.A., and Evrard, A.E., 1997, *Simulations of Galaxy Clusters With and Without Winds: I. The Structure Of Clusters*, astro-ph/9710324 (electronic publication only).
36. Mathiesen, B, and Evrard, A.E., 1998, *Constraints on  $\Omega_0$  and Cluster Evolution Using the ROSAT LogN-LogS*, Monthly Notices Royal Astron Soc, 295, 769.
37. Owen, J.M., Weinberg, D.H., Evrard, A.E., Hernquist, L., and Katz, N., 1998, *Hydrodynamic Cosmological Simulations With Scale-Free Initial Conditions I. Adiabatic Hydrodynamics*, Astrophys J, 503, 160.
38. Evrard, A.E., 1998, *Well of Darkness*, Nature, 394, 122.
39. Mohr, J.J., Mathiesen, B., and Evrard, A.E., 1999, *Properties of the Intracluster Medium in an Ensemble of Nearby Galaxy Clusters*, Astrophys J, 517, 627.

40. Irwin, J.A., Bregman, J.N., and Evrard, A.E., 1999, *Radial Temperature Profiles of X-Ray-Emitting Gas Within Clusters of Galaxies*, *Astrophys J*, 519, 518.
41. Arnaud, M., and Evrard, A.E., 1999, *The  $L_X$ — $T$  Relation and Intracluster Gas Fractions of X-Ray Clusters*, *Monthly Notices Royal Astron Soc*, 305, 631.
42. Evrard, A.E., 1999, *Real or Virtual Large-Scale Structure?*, *Proc Nat'l Acad of Sci*, v. 96, 4228.
43. Mathiesen, B., Evrard, A.E., Mohr, J.J., 1999, *The Effects of Clumping and Substructure on Intracluster Medium Mass Measurements*, *Astrophys J*, 520, L21.
44. Frenk, C.S., et al. (25 authors), 1999, *The Santa Barbara Cluster Comparison Project: A Comparison of Cosmological Hydrodynamics Solutions*, *Astrophys J*, 525, 554.
45. Nagai, D., Sulkanen, M.E. and Evrard, A.E., 2000, *A Multiphase Model for the Intracluster Medium*, *Monthly Notices Royal Astron Soc*, 316, 120.
46. Brieu, P., and Evrard, A.E., 2000, *P4M: A Parallel Version of P3M*, *New Astronomy*, 5, 163.
47. Evrard, A.E., 2000, *Virtual Galaxy Formation*, *Phil. Trans. Roy. Soc. London A*, 358, 2143-2152.
48. Holder, G.P., Mohr, J.J., Carlstrom, J.E., Evrard, A.E. and Leitch, E.M., 2000, *Expectations for an Interferometric Sunyaev-Zel'dovich Effect Survey for Galaxy Clusters*, *Astrophys J*, 544, 629.
49. Mohr, J.J., Reese, E.D., Ellingson, E., Lewis, A.D., and Evrard, A.E., 2000, *The X-Ray Size-Temperature Relation for Intermediate Redshift Galaxy Clusters*, *Astrophysical J*, 544, 109.
50. Frenk, C.S., Colberg, J.M., Couchman, H.M.P., Efstathiou, G., Evrard, A.E., Jenkins, A., MacFarland, T.J., Moore, B., Peacock, J.A., Pearce, F.R., Thomas, P.A., White, S.D.M. and Yoshida, N., 2000, *Public Release Of N-Body Simulation and Related Data by the Virgo Consortium*, astro-ph/0007362 (electronic publication only).
51. Colberg, J.M., White, S.D.M., Yoshida, N., MacFarland, T., Jenkins, A., Frenk, C.S., Pearce, F.R., Evrard, A.E., Couchman, H.M.P., Efstathiou, G., Peacock, J., Thomas, P.A., 2001, *Clustering of Galaxy Clusters in CDM Universes*, *Monthly Notices Royal Astron Soc*, 319, 209.
52. Mathiesen, B.F., and Evrard, A.E., 2001, *Four Measures of the Intracluster Medium Temperature and Their Relation to Dynamical State*, *Astrophysical J*, 546, 100.

53. Jenkins, A., Frenk, C.S., White, S.D.M., Colberg, J.M., Cole, S., Evrard, A.E., Yoshida, N., 2001, *Mass Function of Dark Matter Halos*, Monthly Notices Royal Astron Soc, 321, 372.
54. Bialek, J.J., Evrard, A.E., Mohr, J.J., *Effects of Preheating on X-Ray Scaling Relations in Galaxy Clusters*, 2001, Astrophys J, 555, 597.
55. Dolag, K., Evrard, A. and Bartlemann, M., 2001, *The Temperature-Mass Relation in Magnetized Galaxy Clusters*, Astron & Astrophys, 369, 36.
56. Voit, G.M., Evrard, A.E., and Bryan, G.L., *Confusion of Diffuse Objects in the X-Ray Sky*, 2001, Astrophys. J, 548, L123.
57. Yoshida, N., Colberg, J., White, S. D. M., Evrard, A. E., MacFarland, T. J., Couchman, H. M. P., Jenkins, A., Frenk, C. S., Pearce, F. R., Efstathiou, G., Peacock, J. A., Thomas, P. A., *Simulations of Deep Pencil-beam Redshift Surveys*, 2001, Monthly Notices Royal Astron Soc, 325, 803.
58. Zaroubi, S., Squires, G., de Gasperis, G., Evrard, A., Hoffman, Y. and Silk, J. 2001, *Deprojection Galaxy Cluster X-ray, Sunyaev-Zel'dovich Temperature Decrement and Weak Lensing Mass Maps*, Astrophys J, 561, 600.
59. Hamana, T., Yoshida, N., Suto, Y. and Evrard, A.E. 2001, *Clustering of Dark Matter Halos on the Light-cone: Scale-, Time- and Mass-dependence of the Halo Biasing in the Hubble Volume Simulations*, Astrophys J, 561, L143.
60. Evrard, A.E., MacFarland, T. J., Couchman, H. M. P., Colberg, J., Yoshida, N., White, S. D. M., Jenkins, A., Frenk, C. S., Pearce, F. R., Efstathiou, G., Peacock, J. A., Thomas, P. A., 2002, *Galaxy Clusters in Hubble Volume Simulations: Cosmological Constraints from Sky Survey Populations*, Astrophys J, 573, 7.
61. Bialek, J.J., Evrard, A.E., Mohr, J.J., 2002, *A Cold Front in a Preheated Galaxy Cluster*, Astrophys J, 578, L9.
62. Busha, M.T., Adams, F.C., Wechsler, R.H., Evrard, A.E. 2003, *Future Evolution of Cosmic Structure in an Accelerating Universe*, Astrophys J, 596, 713.
63. Adams, F.C., Busha, M.T., Evrard, A.E. Wechsler, R.H., 2003, *The Asymptotic Structure of Space-Time*, Intl. J. Mod. Phys., D12, 1743.
64. Mohr, J.J. O'Shea, B., Evrard, A.E., Bialek, J. Haiman, Z., 2003, *Studying Dark Energy with Galaxy Cluster Surveys*, Nucl. Phys. B, 124, 63.

65. Kasun, S.F. and Evrard, A.E., 2005, *Shapes and Alignments of Galaxy Cluster Halos*, *Astrophys. J.*, 629, 781.
66. Miller, C.J, et al. (15 authors), 2005, *The C4 Clustering Algorithm: Clusters of Galaxies in the Sloan Digital Sky Survey*, *Astron. J.*, v. 130, p. 968.
67. Busha, M.T., Evrard, A.E. Adams, F.C. and Wechsler, R.H 2005, *The Ultimate Halo Mass in a LCDM Universe*, *Monthly Notices Royal Astron. Soc.*, 363, L11.
68. Pawl, A., Evrard, A.E. and Dupke, R.A., 2005, *Detecting Intracluster Gas Motion in Galaxy Clusters: Mock Astro-E2 Observations*, *Astrophys. J.*, 631, 773.
69. Springel, V., White, S.D.M., Jenkins, A., Frenk, C.S., Yoshida, N., Gao, L., Navarro, J., Thacker, R., Croton, D., Helly, J., Peacock, J.A., Cole, S., Thomas, P., Couchman, H. Evrard, A., Colberg, J., Pearce, F., 2005, *Simulating the Joint Evolution of Quasars, Galaxies and Their Large-scale Distribution*, *Nature*, 435, 629.
70. O'Hara, T.B., Mohr, J.J., Bialek, and J.J., Evrard, A.E., 2006, *Effects of Mergers and Core Structure on the Bulk Properties of Nearby Galaxy Clusters*, *Astrophys. J.*, 639, 64.
71. Stanek, R., Evrard, A.E., Böhringer, H., Schuecker, P., and Nord, B., 2006, *The X-Ray Luminosity-Mass Relation for Local Clusters of Galaxies*, *Astrophys. J.*, 648, 956.
72. Lee, J. and Evrard, A.E., 2007, *Cluster-Supercluster Alignments*, *Astrophys. J.*, 657, 30.
73. Busha, Michael T.; Evrard, August E.; Adams, Fred C., 2007, *The Asymptotic Form of Cosmic Structure: Small Scale Power and Accretion History*, *Astrophys. J.*, 665, 1.
74. Koester, B. P., McKay, T. A., Annis, J., Wechsler, R. H., Evrard, A., Bleem, L., Becker, M., Johnston, D., Sheldon, E., Nichol, R., and 16 coauthors, 2007, *A MaxBCG Catalog of 13,823 Galaxy Clusters from the Sloan Digital Sky Survey*, *Astrophys. J.*, 660, 239.
75. Koester, B.P., McKay, T.A., Annis, J., Wechsler, R.H., Evrard, A.E.; Rozo, E., Bleem, L., Sheldon, E.S., Johnston, D. 2007, *MaxBCG: A Red Sequence Galaxy Cluster Finder*, *Astrophys. J.*, 660, 221.
76. Dupke, R.A., Mirabal, N., Bregman, J.N., Evrard, A.E., 2007, *The Merger in Abell 576: A Line-of-Sight Bullet Cluster*, *Astrophys. J.*, 668, 781.

77. Cohn, J. D.; Evrard, A. E.; White, M.; Croton, D.; Ellingson, E., 2007, *Red-sequence Cluster Finding in the Millennium*, Monthly Notices Royal Astron Soc, 382, 1738.
78. Becker, M. R.; McKay, T. A.; Koester, B.; Wechsler, R. H.; Rozo, E.; Evrard, A.; Johnston, D.; Sheldon, E.; Annis, J.; Lau, E.; Nichol, R.; Miller, C., 2007, *The Mean and Scatter of the Velocity Dispersion-Optical Richness Relation for maxBCG Galaxy Clusters*, Astrophys. J., 669, 905.
79. Rykoff, E. S.; McKay, T. A.; Becker, M. R.; Evrard, A.; Johnston, D. E.; Koester, B. P.; Rozo, E.; Sheldon, E. S.; Wechsler, R. H., 2008, *Measuring the Mean and Scatter of the X-Ray Luminosity--Optical Richness Relation for maxBCG Galaxy Clusters*, Astrophys. J., 675, 1106.
80. Nord, B.; Stanek, R.; Rasia, E.; Evrard, A.E., 2008, *Effects of Selection and Covariance on X-ray Scaling Relations of Galaxy Clusters*, Monthly Notices Royal Astron Soc, 381, 10.
81. Evrard, A.E., Bialek, J., Busha, M., White, M., Habib, S., Heitmann, K., Warren, M., Rasia, E., Tormen, G., Moscardini, L., Power, C., Jenkins, A.R., Gao, L., Frenk, C.S., Springel, V., White, S. D. M., and Diemand, J., 2008, *Virial Scaling of Massive Dark Matter Halos: Why Clusters Prefer a High Normalization Cosmology*, Astrophys. J., 672, 122.
82. Rykoff, E. S.; Evrard, A.E.; McKay, T.A.; Becker, M.R.; Johnston, D.E.; Koester, B.P.; Nord, B.; Rozo, E.; Sheldon, E.S.; Stanek, R.; Wechsler, R.H., 2008, *The Lx-M Relation of Clusters of Galaxies*, Monthly Notices Royal Astron Soc, 387, 28.
83. Rozo, E.; Wechsler, R.H.; Koester, B.P.; Evrard, A.E.; McKay, T.A., 2008, *Optically-Selected Cluster Catalogs as a Precision Cosmology Tool*, Astrophys. J., submitted, (astro-ph/0703574).
84. Rozo, E.; Wechsler, R.H.; Koester, B.P.; Evrard, A.E.; McKay, T.A.; Johnston, D.; Sheldon, E.S.; Annis, J.; Frieman, J.A., 2008, *Cosmological Constraints from SDSS maxBCG Cluster Abundances*, Astrophys. J., submitted, (astro-ph/0703571).
85. Johnston, D.E.; Sheldon, E.S.; Wechsler, R.H.; Rozo, E.; Koester, B.P.; Frieman, J.A.; McKay, T.A.; Evrard, A.E.; Becker, M.R.; Annis, J., 2008, *Cross-correlation Weak Lensing of SDSS Galaxy Clusters II: Cluster Density Profiles and the Mass-Richness Relation*, Astrophys. J., submitted, (arXiv.org:0709.1159).
86. Henry, J.P.; Evrard, A.E.; Hoekstra, H.; Babul, A.; Mahdavi, A., 2009, *The X-ray Cluster Normalization of the Matter Power Spectrum*, Astrophys. J., 691, 1307 (arXiv.org:0809.3832).

87. Rozo, E.; Rykoff, E.S.; Evrard, A.; Becker, M.; McKay, T.; Wechsler, R.H.; Koester, B.P.; Hao, J.; Hansen, S.; Sheldon, E.; Johnston, D.; Annis, J.; Frieman, J., 2009, *Constraining the Scatter in the Mass-Richness Relation of maxBCG Clusters With Weak Lensing and X-ray Data*, *Astrophys. J.*, 699, 768 (arXiv.org:0809.2794).
88. Rozo, E.; Rykoff, E.S.; Koester, B.P.; McKay, T.; Hao, J.; Evrard, A.; Wechsler, R.H.; Hansen, S.; Sheldon, E.; Johnston, D.; Becker, M.; Annis, J.; Bleem, L.; Scranton, R., 2009, *Improvement of the Richness Estimates of maxBCG Clusters*, *Astrophys. J.*, 703, 601 (arXiv.org:0809.2797).
89. Stanek, R.; Rudd, D.; Evrard, A.E., 2009, *The Effect of Gas Physics on the Halo Mass Function*, *Monthly Notices Royal Astron Soc.*, 394, L11 (arXiv.org:0809.2805).
90. Molnar, S.M.; Hearn, N.; Haiman, Z.; Bryan, G.; Evrard, A.E.; Lake, G. 2009, *Accretion Shocks in Clusters of Galaxies and their SZ Signature from Cosmological Simulations*, *Astrophys. J.*, 696, 1640 (arXiv:0902.3323).
91. Rozo, E.; Rykoff, E.S.; Evrard, A.; Becker, M.; McKay, T.; Wechsler, R.H.; Koester, B.P.; Hao, J.; Hansen, S.; Sheldon, E.; Johnston, D.; Annis, J.; Frieman, J. 2009, *Constraining the Scatter in the Mass-richness Relation of maxBCG Clusters with Weak Lensing and X-ray Data*, *Astrophys. J.*, 699, 768 (arXiv:0809.2794).
92. Hao, J.; Koester, B.P.; McKay, T.A.; Rykoff, E.S.; Rozo, E.; Evrard, A.; Annis, J.; Becker, M.; Busha, M.; Gerdes, D.; Johnston, D.; Sheldon, E.; Wechsler, R. 2010, *Precision Measurements of the Cluster Red Sequence Using an Error-Corrected Gaussian Mixture*, *Astrophys. J.*, 699, 768 (arXiv: 0907.4383).
93. Rozo, E.; Rykoff, E.S.; Koester, B.P.; McKay, T.; Hao, J.; Evrard, A.; Wechsler, R.H.; Hansen, S.; Sheldon, E.; Johnston, D.; Becker, M.; Annis, J.; Bleem, L.; Scranton, R. 2009, *Improvement of the Richness Estimates of maxBCG Clusters*, *Astrophys. J.*, 699, 768 (arXiv:0809.2794).
94. Rozo, E.; Wechsler, R.H.; Rykoff, E.S.; Annis, J.; Becker, M.; Evrard, A.; Frieman, J.; Hansen, S.; Hao, J.; Johnston, D.; Koester, B.P.; McKay, T.; Sheldon, E.; Weinberg, D. 2010, *Cosmological Constraints from the SDSS maxBCG Cluster Catalog*, *Astrophys. J.*, 708, 645 (arXiv:0902.3702).
95. Finoguenov, A.; Sanderson, A. J. R.; Mohr, J. J.; Bialek, J. J.; Evrard, A. 2010, *Hydrodynamic simulations of correlation and scatter in galaxy cluster maps*, *Astron. Astrophys.*, 509, 85 (arXiv:0912.1848).
96. Zhang, Y.-Y.; Okabe, N.; Finoguenov, A.; Smith, G.P.; Piffaretti, R.; Valdarnini, R.; Babul, A.; Evrard, A.E.; Mazzotta, P.; Sanderson, A.J. R.; Marrone, D.P. 2010, *LoCuSS: A Comparison of Cluster Mass Measurements from XMM-Newton and*



*Subaru—Testing Deviation from Hydrostatic Equilibrium and Non-thermal Pressure Support*, Astrophys. J., 711, 1033 (arXiv:1001.0780).

97. Cunha, C.E.; Evrard, A.E. 2010, *Sensitivity of galaxy cluster dark energy constraints to halo modeling uncertainties*, Phys. Rev. D, 81, 3509 (arXiv:0908.0526).
98. Stanek, R.; Rasia, E.; Evrard, A. E.; Pearce, F.; Gazzola, L. 2010, *Massive Halos in Millennium Gas Simulations: Multivariate Scaling Relations*, Astrophys. J., 715, 1508 (arXiv:0910.1599).
99. Hao, J.; McKay, T.A.; Koester, B.P.; Rykoff, E.S.; Rozo, E.; Annis, J.; Wechsler, R.H.; Evrard, A.; Siegel, S.R.; Becker, M.; Busha, M.; Gerdes, D.; Johnston, D.E.; Sheldon, E. 2010, *A GMBCG Galaxy Cluster Catalog of 55,424 Rich Clusters from SDSS DR7*, Astrophys. J. Suppl., 191, 254 (arXiv:1010.5503).
100. Rasia, E.; Mazzotta, P.; Evrard, A.; Markevitch, M.; Dolag, K.; Meneghetti, M. 2011, *Scaling Relation in Two Situations of Extreme Mergers*, Astrophys. J., 729, 45 (arXiv:1012.4027).
101. Allen, S.; Evrard, A.E.; Mantz, 2011, *Cosmological Parameters from Observations of Galaxy Clusters*, Ann. Rev. Astron. Astrophys., 49, 409.
102. Rozo, E.; Rykoff, E.; Koester, B.; Nord, B.; Wu, H.-Y.; Evrard, A.; Wechsler, R., 2011, *Extrinsic Sources of Scatter in the Richness-mass Relation of Galaxy Clusters*, Astrophys. J., 740, 53.
103. Hart, Q.N.; Stocke, J.T.; Evrard, A.E.; Ellingson, E.E.; Barkhouse, W.A., 2011, *The Evolution of Radio Galaxies and X-Ray Point Sources in Coma Cluster Progenitors since  $z \sim 1.2$* , Astrophys. J., 740, 59.
104. Erickson, B.M.S., Cunha, C.E.; Evrard, A.E., 2011, *Influence of Projection in Cluster Cosmology Studies*, Phys. Rev. D, 84, 103506.
105. Rykoff, E.; Koester, B.; Rozo, E.; Annis, J.; Evrard, A.E.; Hansen, S.M.; Hao, J.; Johnston, D.E.; McKay, T.A.; Wechsler, R.H. 2011, *Robust Optical Richness Estimation with Reduced Scatter*, Astrophys. J., 746, 178.
106. (Submitted) Rozo, E., Evrard, A.E., Bartlett, J.G., Rykoff, E.S., 2012, *A Comparative Study of Local Galaxy Clusters: I. Derived X-ray Observables*, MNRAS.
107. (Submitted) Rozo, E., Evrard, A.E., Bartlett, J.G., Rykoff, E.S., 2012, *A Comparative Study of Local Galaxy Clusters: II. X-ray and SZ Scaling Relations*, MNRAS.

## Papers in Conference Proceedings

Evrard, A.E., 1985, “*Large-Scale Clustering of Galaxies With Massive Dark Halos,*” BAAS, v. 17, p. 866.

Evrard, A.E., et al, 1988, “*Simulated X-Ray Clusters in the Cold Dark Matter Model*”, in Large-Scale Structure and Motions in the Universe, eds. G. Giuricin, (Dordrecht: Reidel), p. 228.

Evrard, A.E., 1988, “*Extending N-Body Methods With SPH,*” in The Post-Recombination Universe, Proc. NATO/ASI Workshop, eds. N. Kaiser and A. Lazenby, (Dordrecht: Reidel), 157.

Evrard, A.E., 1988, “*The Advent of Cosmological Gas Dynamic Simulations*”, in Large-Scale Structures of the Universe, IAU Symposium No.130, eds. J. Audouze, M. Pelletan and A. Szalay, (Dordrecht: Kluwer), 557.

Evrard, A.E., 1989, “*Clues to Galaxy Activity From Rich Cluster Simulations*”, in The Interstellar Medium in External Galaxies, eds. D. Hollenbach and H. Thronson (NASA conf. pub. no. 3084), 343.

Evrard, A.E., 1989, “*Exploring Origins for the Hubble Sequence,*” in The Epoch of Galaxy Formation, eds. C.S. Frenk et al. (Dordrecht: Kluwer), 265.

Evrard, A.E., 1990, “*Hydrodynamic Simulations of the Intracluster Medium,*” in Clusters of Galaxies, eds. R. Oegerle, M.J. Fitchett and L. Danly, (Cambridge : Camb. Univ. Press.), 287.

Evrard, A.E., and Henry, J.P., 1991, “*X-Ray Cluster Counts: What Rosat Should See,*” in Traces of Primordial Structure in the Universe, eds. H.Bohringer and R.Treumann, (MPE Report 227), 127.

Blanchard, A., Wachter, K., Evrard, A.E., and Silk, J., 1992, “*Clusters and the X-Ray Background,*” in The X-ray Background, eds. X. Barcons and A. Fabian, (Cambridge: Camb. Univ. Press), 244.

Evrard, A.E., 1992, “*Theoretical Studies of Environmental Effects on Galaxies,*” in Physics of Galaxies : Nature or Nurture?, eds. T. Thuan, C. Balkowski, and J. Than Van, (Paris: Editions Frontieres), 375.

Evrard, A.E., 1993, “*Experimental Galaxy Formation,*” in The Evolution of Galaxies and Their Environment, eds. J.M. Shull and H. Thronson, (Dordrecht :Kluwer), 69.

Evrard, A.E., 1993, "*Gas Dynamic Simulations of Galaxy Formation*," in The Evolution of Galaxies and Their Environment: Contributed Papers, eds. D. Hollenbach, H. Thronson and J.M. Shull, (NASA Conf. Pub. 3190), 64.

Summers, F.J., Evrard, A.E. and Davis, M., 1993, "*Galaxy Tracers in N-Body Simulations*", in The Evolution of Galaxies and Their Environment: Contributed Papers, eds. D. Hollenbach, H. Thronson and J.M. Shull, (NASA Conf. Pub. 3190), 56.

Metzler, C.A., and Evrard, A.E., 1993, "*Enrichment and Heating of the Intracluster Medium by Ejection From Galaxies*", in The Evolution of Galaxies and Their Environment: Contributed Papers, eds. D. Hollenbach, H. Thronson and J.M. Shull, (NASA Conf. Pub. 3190), 111.

Crone, M.M., Evrard, A.E., and Richstone, D., 1993, "*The Cosmological Dependence of Cluster Density Profiles*," BAAS, 25, 839.

Pildis, R.A., Bregman, J.N., and Evrard, A.E., 1993, "*Rosat Observations of Compact Groups of Galaxies*," BAAS, 25, 1296.

Metzler, C.A., and Evrard, A.E., 1993, "*Simulations of the Intracluster Medium Incorporating Feedback*," BAAS, 25, 1426.

Crone, M.M., Evrard, A.E. and Richstone, D., 1993, "*Substructure in Clusters as a Cosmological Test*", BAAS, 25, 1427.

Evrard, A.E., 1994, "*Dynamics of Clusters of Galaxies*," in Numerical Simulations in Astrophysics, eds. J. Franco et al., (Cambridge : Cambridge Univ. Press), p. 28.

Crone, M.M., Evrard, A.E., Richstone, D.O., and Geller, M.J., 1994, "*The Effect of Mergers and Accretions on Clusters of Galaxies*", BAAS, 26, 1402.

Metzler, C.A., and Evrard, A.E., 1994, "*Galactic Feedback and Cluster Evolution*," BAAS, 26, 1402.

Pildis, R.A., Bregman, J.N., and Evrard, A.E., 1994, "*Deep X-Ray and Optical Observations of Hickson Compact Groups*", BAAS, 26, 1511.

Mohr, J.J., Fabricant, D.G., Geller, M.J., and Evrard, A.E., 1994, "*Cosmological Constraints From Cluster X-Ray Morphologies*", BAAS, 26, 1516.

Evrard, A.E., 1995, "*Simulations of Clusters of Galaxies*", in Clusters of Galaxies, eds. F. Durret, et al, (Gif-sur-Yvette: Editions Frontieres), p. 241.

Metzler, C.A., and Evrard, A.E., 1995, "*Models of the Intracluster Medium With Feedback From Cluster Galaxies*," in Clusters of Galaxies, eds. F. Durret, et al, (Gif-sur-Yvette: Editions Frontieres), p. 251.

Evrard, A.E., 1996, “*The Baryon Content of Galaxy Clusters and the Universe*”, in Dark Matter, Clocks and Tests of Fundamental Laws, eds. B. Guiderdoni, et al, (Gif-sur-Yvette: Editions Frontieres), p. 53.

Mathiesen, B., and Evrard, A.E., 1996, “*Semi-Analytical Predictions of Rosat X-Ray Cluster Abundances For a Wide Range of Cosmological Models*,” BAAS, 189, 3704.

Evrard, A.E., 1997, “*The Tully--Fisher Relation : A Numerical Simulator's Perspective*,” in Galaxy Scaling Relations: Origins, Evolution, and Applications, eds. L. daCosta and A. Renzini, (Berlin: Springer), p. 25.

Evrard, A.E., 1998, “*Insights on Coma From Numerical Simulations*,” in Untangling Coma Berenices: A New Vision of an Old Cluster, eds, A. Mazuer, et al (Singapore: World Scientific), p. 136.

Evrard, A.E., 1998, “*Dark Matter*,” BAAS, 192, 3105.

Brieu, P.P., and Evrard, A.E., 1998, “*P4M : A Parallel Version of P3M*”, BAAS, 192, 4202.

Irwin, J.A., Bregman, J.N., and Evrard, A.E., 1998, “*Radial Temperature Profiles of X-Ray-Emitting Gas Within Clusters of Galaxies*,” BAAS, 192, 3802.

Nagai, D., Sulkanen, M., and Evrard, A.E., 1999, “*A Multiphase Model for the Intracluster Medium*,” HEAD, 31, 04.10.

Colberg, J.M., White, S.D.M., MacFarland, T.J., Jenkins, A., Frenk, C.S., Pearce, F.R., Evrard, A.E., Couchman, H.M.P., Efstathiou, G., Peacock, J.A., Thomas, P.A. (the Virgo Consortium), 1999, “*Galaxy Clusters in the Hubble Volume Simulations*,” in Wide Field Surveys in Cosmology, eds. S.Colombi and Y.Mellier, pp. 343-345.

Evrard, A.E., 1999, “*Simulating Large-Scale Structure*,” in Evolution of Large-Scale Structure: From Recombination to Garching, eds. A.J. Banday, R.K. Sheth, L.N. daCosta, pp. 249-261.

Mohr, J.J., Reese, E.D., Carlstrom, J.E., Holder G.P., and Evrard, A.E., 1999, “*Overcoming Systematics in Sunyaev-Zel'dovich Effect Distance Measurements*”, BAAS, 194, 5811.

Nagai, D., Sulkanen, M., and Evrard, A.E., 1999, “*A Multiphase Model for the Intracluster Medium*,” BAAS, 194, 8902.

Mathiesen, B.F., and Evrard, A.E., “*How Does a Cluster's Dynamical State Affect ICM Temperature Measurements?*” BAAS, 194, 1902.

- Evrard, A.E., 1999, “*How Many Clusters in the Sky? Expectations From the Hubble Volume Light-Cone Surveys*,” BAAS, 194, 5810.
- Arnaud, M., Neumann, D., Aghanim, N., Evrard A., and Blanchard, A., 2000, “*Cluster Scaling Laws and Mass Content*,” in Large-Scale Structure in the X-ray Universe, eds. M. Plionis and I. Georgantopoulos, p. 77.
- Voit, G. M.; Bryan, G.; Evrard, A. E.; Donahue, M. 2000, “*Clusters, Groups, and the Diffuse X-ray Background*”, BAAS, 197, 10712.
- Bialek, J., Evrard, A.E. and Mohr, J.J. 2000, “*Effects of Preheating on X-ray Scaling Relations in Galaxy Clusters*,” BAAS, 197, 10716.
- Evrard, A.E., Kasun, S.F. & Dykema, P.M. 2001, “*Clusters and Superclusters in Hubble Volume Simulations*,” BAAS, 199, 16116.
- Mohr, J.J., O’Shea, B., Evrard, A.E., Bialek, J. and Haiman, Z, 2002, “*Studying Dark Energy with Galaxy Cluster Surveys*” in Proc. Dark Matter 2002 (astro-ph/0208102).
- Yoshida, N., Hamana, T., Suto, Y. and Evrard, A.E., 2003, “*Clustering of Dark Halos along the Lightcone*,” IAUS, 208, 467.
- Bialek, J., Evrard, A.E. and Mohr, J.J. 2003, “*The Effect of Preheating on the Physical Structure of the Intracluster Medium*,” BAAS, 202, 1106.
- Johnston, D. *et al.* (15 authors) 2004, “*Measurements of the Clustering of Mass in the Universe by Weak Lensing of SDSS Galaxy*” BAAS, 205, 14706.
- Cavagnolo, K.W., Donahue, M.E., Voit, G.M., Horner, D.J., Evrard, A.E. 2004, “*Entropy Distributions in the Cores of Nearby X-ray Luminous Clusters of Galaxies*” BAAS, 205, 14715.
- Floor, S.N and Evrard, A.E. 2004, “*Systematic Errors in Weak Lensing Cluster Mass Estimates*”, BAAS, 205, 14809.
- McKay, T.A., Koester, B., Wechsler, R., Annis, J., Evrard, A., Sheldon, E., Johnston, D., Hansen, S., Scranton, R. (SDSS Collaboration) 2005, *A MaxBCG Galaxy Cluster Catalog Selected from SDSS Imaging Data*, BAAS, 206, 1012.
- Busha, Michael T.; Evrard, A. E.; Adams, F. C. 2007, *The Equilibrium Structure of Dark Matter Halos*, Bull. DDA, 38, 0502.
- Nord, Brian; Evrard, A. E.; Rasia, E.; Stanek, R, 2008, *The Many Faces of Galaxy Clusters: Mock Observations of Cluster Populations in Multiple Wavelengths*, BAAS, 212, 2105.

[NOTE: Recording of AAS and other meeting abstracts discontinued in 2008.]

## White Papers

Haiman, Z. et al (37 authors) 2005, *An X-ray Galaxy Cluster Survey for Investigations of Dark Energy*, astro-ph/0507013.

Annis, J., Bridle, S., Castander, F.J., Evrard, A.E.; Fosalba, P.; Frieman, J.A., Gaztanaga, E., Jain, B., Kravtsov, A.V., Lahav, O., Lin, H., Mohr, J., Ricker, P. Stebbins, A., Wechsler, R.H., Weinberg, D.H., and Weller, J. 2005, *Dark Energy Studies: Challenges to Computational Cosmology*, astro-ph/0510194.

Annis, J., Bridle, S., Castander, F.J., Evrard, A.E.; Fosalba, P.; Frieman, J.A., Gaztanaga, E., Jain, B., Kravtsov, A.V., Lahav, O., Lin, H., Mohr, J., Stebbins, A., Walker, T.P., Wechsler, R.H., Weinberg, D.H., and Weller, J. 2005, *Constraining Dark Energy with the Dark Energy Survey: Theoretical Challenges*, astro-ph/0510195.

Giacconi, R. et al. (21 authors), 2009, *Galaxy Clusters and the Cosmic Cycle of Baryons Across Cosmic Times*, arXiv:0902.4857.

Myers, S.T. et al. (24 authors), 2009, *Galaxy Cluster Astrophysics and Cosmology: Questions and Opportunities for the Coming Decade*, arXiv:0903.0401.

Kravtsov, A., et al. (15 authors), 2009, *Towards the 2020 Vision of the Baryon Content of Galaxy Groups and Clusters*, arXiv:0903.0388.

Vikhlinin, A. et al. (14 authors), *Cosmological Studies With A Large-Area X-ray Telescope*, arXiv:0903.2297.

Vikhlinin, A. et al. (21 authors), 2009, *X-ray Cluster Cosmology*, arXiv:0903.5320.

Schlegel, D. et al. (21 authors), 2011, *The BigBOSS Experiment*, arXiv:1106.1760.

## Book Chapters

Evrard A.E. and Gioia, I.M., 2002, “*Clusters, Cosmology and Mergers*,” in Merging Processes in Clusters of Galaxies, eds. L. Feretti, I. M. Gioia, and G. Giovannini (Dordrecht: Kluwer), p. 312.

Evrard A.E. 2004, “*Galaxy Clusters as Probes of Cosmology and Astrophysics*,” Carnegie Observatories Astrophysics Series, Vol. 3: Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Evolution, eds. J. S. Mulchaey, A. Dressler, and A. Oemler (Cambridge: Cambridge University Press), p. 1.

## Conference Talks

- 1987 The Post-Recombination Universe - Cambridge, UK
- 1988 Formation and Evolution of Large Scale Structure in the Universe - Santander, Spain
- 1989 Clusters of Galaxies - Space Telescope Science Institute
- 1989 Computing Cosmologies - Canadian Institute for Theoretical Astrophysics
- 1989 The Epoch of Galaxy Formation - Durham, UK
- 1990 Texas ESO/CERN Symposium - Brighton, UK
- 1990 Large-Scale Structure in the Universe - Jerusalem
- 1990 Stellar Dynamics and Formation of Galaxies - Aspen, CO
- 1990 Galaxy Formation - Taos, NM
- 1990 Galaxies at High Redshift - Oxford, UK
- 1990 Traces of Primordial Structure in the Universe - Ringberg, Germany
- 1991 The Physics of Galaxy Formation - Aspen, CO
- 1991 Clusters and Superclusters of Galaxies - Cambridge, UK
- 1991 2nd DAEC Nanoworkshop - Meudon, France
- 1992 XXVIIth Rencontres de Moriond - Les Arcs, France
- 1992 The Evolution of Galaxies and Their Environment, Grand Teton National Park
- 1993 First Great Lakes Cosmology Workshop - Ann Arbor, MI
- 1993 Physics Computing - Albuquerque, NM
- 1993 Numerical Astrophysics Workshop - Mexico City, Mexico
- 1993 SPH in Astrophysics - Trieste, Italy
- 1993 Large-Scale Structure after COBE - Aspen, CO
- 1994 XXIXth Rencontres de Moriond - Meribel, France
- 1994 Galaxy Morphology at High Redshift - STScI, Baltimore, MD
- 1994 Great Lakes Cosmology Workshop II, Fontana, WI
- 1994 Physics of Galaxy Clusters - Aspen, CO
- 1994 Gravitational Clustering in Cosmology - Aspen, CO
- 1994 The Mass and Composition of Galaxy Clusters - Munich, Germany
- 1995 Dark Matter, Clocks and Tests of Fundamental Laws - Villars-sur-Ollon, Switzerland
- 1995 Great Lakes Cosmology Workshop III - Cleveland, OH
- 1995 Radiation Backgrounds and Galaxy Formation - ITP, UCSB
- 1995 Mapping, Measuring and Modeling the Universe - Valencia, Spain
- 1996 Baryons in the Universe - UC, Berkeley
- 1996 Great Lakes Cosmology Workshop IV - Minneapolis, MN
- 1996 HEAD96 (High Energy Astrophysics Division '96 Meeting) - San Diego, CA
- 1996 Workshop on Large--scale Structure - Ringberg, Germany
- 1996 ESO Workshop on Galaxy Scaling Relations - Garching, Germany
- 1996 Emergence of Structure in the Universe at the Level of Galaxies - Vatican City, Rome
- 1997 Observational Tests of Cosmological Models - Aspen, CO

1997 Clusters of Galaxies at Different Redshifts - Ruidiso, NM  
 1997 A New Vision of an Old Cluster: Untangling Coma Berenices -  
 Marseilles, France  
 1998 Dark Matter '98 - UCLA  
 1998 APS Meeting, Cosmology Workshop - OSU  
 1998 Great Lakes Cosmology Workshop VI - Pittsburgh, PA  
 1998 Structure and Evolution of the Universe, Special Session of 192nd AAS  
 Meeting - San Diego, CA  
 1998 Dark98 - Heidelberg, Germany  
 1998 From Recombination to Garching - MPA--Garching, Germany  
 1999 Sigma Xi Presentation, Ford Scientific Research Labs - Dearborn, MI  
 1999 Address, Nat'l Honor Society Induction, Monroe HS - Monroe, MI  
 1999 Inner Space/Outer Space II - Chicago, IL  
 1999 194th American Astronomical Society Meeting - Chicago, IL  
 1999 The Cosmological Constant - Aspen, CO  
 1999 Gravitational Lensing - Boston, MA  
 1999 Large-Scale Structure in the X-ray Universe - Santorini, Greece  
 1999 Royal Society Discussion Meeting: Galaxy Formation -London  
 2000 SPS Induction Ceremony Lecture - University of Cincinnati  
 2000 Gas and Galaxy Evolution: VLA 20th Anniversary - Socorro, NM  
 2000 Constructing the Universe with Clusters of Galaxies - Paris  
 2000 Victoria Computational Cosmology Conference – Victoria  
 2001 XXXVI<sup>th</sup> Rencontres de Moriond “Galaxy Clusters and the High  
 Redshift Universe Observed in X-rays” – Les Arcs, France  
 2002 Galaxy Evolution: Theory and Observations – Cozumel, Mexico  
 2002 Matter and Energy in Clusters of Galaxies – National Central University,  
 Taiwan  
 2002 Cosmology and Fundamental Physics from Space – L’Aquila, Italy  
 2002 Neutrino News from the Lab and the Cosmos – Fermilab  
 2003 Testing Cosmological Models with Galaxy Clusters – Ringberg,  
 Germany  
 2003 Clusters of Galaxies: Probes of Cosmological Structure and Galaxy  
 Evolution (Carnegie Institution Centennial Symposium) – Pasadena, CA  
 2003 Cosmology and Astrophysics with Galaxy Clusters – Aspen, CO  
 2003 Cosmology with the Sunyaev-Zel’dovich Effect, Kiyosato, Japan  
 2003 Cosmology with Sunyaev-Zel’dovich Surveys – Center for  
 Cosmological Physics, Chicago  
 2003 N-body Methods in Cosmology– Paris, France  
 2004 COSPAR Conference: Energetic Processes from Clusters of Galaxies –  
 Paris, France  
 2004 Galaxy-Intergalactic Medium Interactions – Kavli Institute for  
 Theoretical Physics, UCSB  
 2004 Fundamental Physics with Clusters of Galaxies – Fermilab  
 2005 The Future of Cosmology with Clusters of Galaxies – Kona, HI  
 2005 Computational Cosmology – Trieste, Italy  
 2005 Clusters of Galaxies – Enrico Fermi Institute, Chicago



- 2006 XLI<sup>st</sup> Rencontres de Moriond: From Dark Halos to Light – La Thuile, Italy
- 2006 Clusters of Galaxies and Astrophysical Plasmas – Trieste, Italy
- 2007 Clusters of Galaxies as Cosmological Probes – Aspen Center for Physics, Aspen, CO
- 2007 Tracing Cosmic Evolution with Clusters of Galaxies: Six Years Later – Sesto, Italy (Conference Summary)
- 2007 X-ray Surveys – Rodos, Greece
- 2007 Cosmic Cartography – KICP, Chicago
- 2008 An XXL Extragalactic Survey: Prospects for the XMM Next Decade – Paris
- 2008 Centro De Ciencias De Benasque Workshop: Modern Cosmology – Benasque, Spain
- 2009 Sunyaev-Zeldovich Universe and the Future of Cluster Cosmology – Perimeter Institute, Waterloo, Ontario
- 2009 CosmoClusters: Cosmology with Galaxy Clusters – Laboratoire d'Astrophysique de Marseille
- 2009 ESO Workshop: Galaxy Clusters in the Early Universe – Pucón, Chile
- 2010 SNOWCLUSTER Workshop – Snowbird, Utah
- 2010 CL J2010: from Massive Galaxy Formation to Dark Energy – IPMU, Japan
- 2011 Monsters, Inc.: Astrophysics and Cosmology with Galaxy Clusters – KITP, Santa Barbara, CA
- 2011 Large Data Sets in Astronomy and Cosmology – DoE ICiS Workshop, Park City, UT
- 2011 Mapping the Structure of the Energetic Universe – Garmisch-Partenkirchen, Germany
- 2012 Cluster Cosmology with the XXL Survey – Versailles

### **Colloquia, Seminars, and Collaboration Talks**

- 1988 Physics Department Colloquium - University of Durham, UK
- 1988 Astrophysics Seminar - Nordita, Copenhagen, DK
- 1988 Astronomy Department Seminar - University of Padua, Italy
- 1989 Center for Astrophysics High Energy Seminar - Harvard University
- 1989 Department of Physics and Astronomy Seminar - MIT
- 1989 Physics Department High Energy Seminar - University of Michigan
- 1989 Astronomy Program Seminar - SUNY at Stony Brook
- 1989 Astronomy Department Colloquium - UC Berkeley
- 1990 Astronomy Department Colloquium - UC Santa Cruz
- 1990 Colloquium - Space Telescope Science Institute
- 1991 CASS Astrophysics Seminar - UC San Diego
- 1991 Astronomy Department Colloquium - University of Toronto
- 1991 Physics Colloquium - Oakland University
- 1991 Center for Particle Astrophysics Seminar - UC Berkeley

1991 Astronomy Seminar - UC Santa Cruz  
1991 Astrophysics Seminar - Fermilab  
1991 Physics Colloquium - University of Oklahoma  
1992 Astrophysics Colloquium - Caltech  
1993 Astrophysics Colloquium - Harvard Center for Astrophysics  
1993 Astronomy Colloquium - Northwestern University  
1993 HPCC Seminar - University of Washington  
1993 Astronomy Colloquium - University of Illinois  
1993 Astronomy Colloquium - Dominion Astrophysical Observatory  
1993 Astronomy Seminar - University of Victoria  
1994 Physics Colloquium - University of Michigan  
1994 Astrophysics Seminar - Canadian Institute for Theoretical Astrophysics  
1994 Astrophysics Seminar - University of Chicago  
1994 Astrophysics Seminar - University of Arizona  
1994 Astrophysics Colloquium - University of Wyoming  
1995 Physics Colloquium - Wayne State University  
1995 Astrophysics Seminar - Institute for Advanced Study, Princeton  
1995 Public Lecture - Oakland Community College  
1996 Astronomy Colloquium - Ohio State University  
1996 Astrophysics Seminar - Case Western Reserve University  
1996 Michigan Journalism Fellows Presentation - University of Michigan  
1996 Astrophysics Colloquium - University of Colorado  
1996 Astrophysics Seminar - Fermilab  
1996 Astrophysics Seminar - Theoretical Astrophysics Center, Copenhagen, Denmark  
1997 Colloquium - Institut d'Astrophysique, Paris, France  
1997 Astrophysics Seminar - SEA-Saclay, France  
1997 Colloquium - Observatoire de Strasbourg, France  
1997 Joint ESO/MPA Colloquium - Garching bei München, Germany  
1997 Astronomy Colloquium - University of Leiden, Holland  
1997 Astronomy Colloquium - University of Utrecht, Holland  
1997 Physics and Astronomy Colloquium - University of Kansas  
1998 Colloquium, Institute for Astronomy - University of Hawaii  
1999 Astronomy and Astrophysics Colloquium - Columbia University  
1999 Astrophysics Colloquium - MIT  
1999 Astronomy Colloquium - Caltech  
1999 Michigan Journalism Fellows Presentation - University of Michigan  
1999 Astrophysics Seminar - University of Pennsylvania  
1999 Astronomy Colloquium - University of Michigan  
1999 Astrophysics Seminar - CITA, University of Toronto  
2000 Astronomy Colloquium - Institute for Astronomy, University of Hawaii  
2000 Astrophysics Seminar - Case Western Reserve University  
2000 Physics Colloquium - University of Cincinnati  
2000 Astrophysics Colloquium - Center for Astrophysics, Harvard University  
2001 Astronomy Colloquium - Ohio University  
2001 Astrophysics Colloquium - Ohio State University

2001 Astronomy Colloquium – University of Illinois  
2001 Astrophysics Seminar - Stanford University  
2001 Colloquium – Carnegie Observatories of Pasadena  
2002 Astrophysics Seminar, IGPP, Lawrence Livermore National  
Laboratories  
2002 Applied Mathematics Seminar, University of Michigan  
2002 Seminar, Center for Cosmological Physics, University of Chicago  
2004 Physics Colloquium, McMaster University  
2003 Statistics Department Colloquium, University of Michigan  
2003 Physics Colloquium, University of Virginia  
2003 Teacher Presentation, Midland Center for the Arts  
2003 Astrophysics Seminar, Tokyo University  
2003 Astronomy Colloquium, University of Kansas  
2004 Physics & Astronomy Colloquium, University of California, Davis  
2004 Astronomy Theory Seminar, University of California, Berkeley  
2004 Physics Colloquium, University of Notre Dame  
2004 Physics Colloquium, Kavli Institute for Theoretical Physics, UCSB  
2004 Physics Colloquium, University of Sussex  
2004 Astrophysics Seminar, University of Portsmouth  
2004 Physics Seminar, Durham University  
2004 Physics Colloquium, University of Waterloo  
2005 Physics and Astronomy Colloquium, Michigan State University  
2005 Physics Seminar, University of Tokyo  
2005 Michigan Center for Theoretical Physics, University of Michigan  
2005 Astrophysics Seminar, SISSA, Trieste  
2005 Physics Colloquium, Rochester Institute of Technology  
2005 Astrophysics Seminar, Durham University  
2005 Astrophysics Seminar, Center for Cosmological Physics, Chicago  
2006 Physics Colloquium, University of California, Berkeley  
2006 Physics Seminar, Durham University  
2006 Astrophysics Lunch Seminar, KIPAC, Stanford University  
2006 Physics Seminar, Durham University  
2006 ICE/CSIC Seminar, Universitat Autònoma de Barcelona, Spain  
2006 Dark Energy Survey Collaboration Meeting, University of Michigan  
2006 Astrophysics Seminar, Canadian Institute for Theoretical Astrophysics,  
Toronto, Canada  
2006 Theory Group Seminar, Fermilab  
2007 Astrophysics Seminar, Michigan State University  
2007 Physics Colloquium, Case Western Reserve University  
2007 Simulation Working Group Summary, Dark Energy Survey  
Collaboration Meeting, University College London  
2008 Colloquium, Shanghai Observatory, Shanghai, China  
2008 Theory Group Seminar, Los Alamos National Lab, Los Alamos, NM  
2008 Joint Astrophysics Seminar, Physics Department, McGill University,  
Montreal, Canada  
2009 Physics and Astronomy Colloquium, University of Pittsburgh

2010	Physics Colloquium, Western Michigan University
2011	Physics Colloquium, University of Minnesota
2011	Astrophysics Seminar, KICP, University of Chicago

### Public Lectures

1995	Michigan Journalism Fellows Fireside Chat, University of Michigan
1998	Michigan Journalism Fellows Fireside Chat, University of Michigan
2002	Saturday Morning Physics, University of Michigan
2004	Knight-Wallace Journalism Fellows Fireside Chat, University of Michigan
2007	Frontiers of Astronomy Lecture Series, Cleveland Museum of Natural History, Cleveland, OH
2008	Saturday Morning Physics, University of Michigan

### Courses Taught

F90	Phys 125 Disc (1)
W91	Phys 115/420 (Living with Physics)
F91	Phys 140 Disc (3)
W92	Phys 668 (Advanced Astrophysics)
F92	Phys 411 (Computational Physics)
F93	Phys 112 (Cosmology)
W94	Phys 668 (Advanced Astrophysics)
F94	Phys 112 (Cosmology)
W95	Phys 411 (Numerical Methods in Physics)
F95	Phys 112 (Cosmology)
W96	Phys 526 (Astrophysics II: Cosmological Structure Formation)
F96	sabbatical leave
W97	sabbatical leave
F97	Phys 526
W98	Phys 140 Lecture (Mechanics)
F98	Phys 140 Lecture
W99	Phys 465 (Senior Seminar)
F99	Phys 140 Lecture
W00	Phys 465
F00	Phys 112
W01	research leave
F01	Phys 125 Lecture (Mechanics)
W02	research leave
F02	Phys 140 Lecture
W03	administrative leave
F03	Phys 526
W04	Phys 140 Lecture

W05	sabbatical leave
F05	Phys 140 Lecture
W06	research leave
F06	Phys 125 Discussion
W07	Phys 411 (Numerical Methods for Physics)
Spr07	Phys 140 Lecture + Discussion
F07	Phys 140 Lecture
W08	Phys 411
F08	Phys 411
W09	Phys 340 (Waves, Heat and Light)
F09	Phys 140
W10	Phys 340
F10	Honors 352 (Cyberscience)
W11	administrative leave
F11	Honors 352 (Cyberscience)
W12	Phys 160 (Honors Mechanics)

### **Other Teaching Information**

1993	Created undergraduate freshman seminar in Cosmology (Physics 112)
1997	Faculty Advisor for Eng477 “Principles of Virtual Reality”
1999	Founded Instructional Technology Oversight Team (ITOT), now Introductory Physics Committee
1999	Search Committee Chair, Instructional Technology Specialist, Physics
2000	Co-developer, LSA Student Assignment Management System (SAMS)
2000-02	Chair, LSA Information Technology Committee
2002	Initiated LSA Faculty Project Grants in Instructional Technology
2002-04	Chair, LSA/MAIS Pilot User Group, M-Pathways Data Mining
2004	Invited Participant, Wiley & Sons University Physics Symposium
2004-05	Mentor to Dave Winn (Lecturer II)
2005-07	CRLT Advisory Board
2005-	Rackham Student Mentor, Taeyjuana Curry
2005-08	Chair, LSA Instructional Technology Committee
2006	Co-developer, LSA Academic Reporting Tools (ART)
2007	Co-founder, Introductory Physics Wiki
2007-	University of Michigan Science Library Committee
2008	UROP Seminar, “Accessing and Reading Scientific Literature”
2008	LSA-CRLT Seminar on Academic Reporting Tools (ART)
2008	LSA Chairs/Directors Seminars on Academic Reporting Tools (ART)
2008-09	Provost Special Committee On Institutional Innovation In Collaborative Technologies for Learning
2008-	University of Michigan Business Intelligence Council of Experts
2009-10	CRLT Colloquium on the Science of Learning
2010	Created new UM Honors Program course, <i>Cyberscience: Computational Science and the Rise of the Fourth Paradigm</i> (Hon 352)

- 2011      Developed *Problem Roulette* site to serve random problems from past introductory physics exams
- 2011      Member of E2-Coach Development Team

### Graduate Students

- Prior      Frank Summers (PhD 1994, UC Berkeley)  
 Mary Crone (PhD 1995)  
 Chris Metzler (PhD 1995)  
 Philippe Brieu (PhD 1997, Univ. Paris VII)  
 Ben Mathiesen (PhD 1999)  
 John Bialek (PhD 2005)  
 Michael Busha (PhD 2007)  
 Rebecca Stanek (PhD 2009, Astronomy)  
 Brian Nord (PhD 2010)

- Current    Anbo Chen  
 Brandon Erickson

### Independent Study Students

- W91            Matthew Morgan (Independent Study, Phys 415)  
 F92            Phil Baggett (Independent Study, Phys 415)  
 Spr92         Rob Gibson (URE)  
 F93,W94      Dan Schreiber (Independent Study, Phys 415)  
 F93,W94      Doug Finkbeiner (Research Assistant)  
 F94            William Radcliffe (Research Assistant)  
 Spr95         Jauder Ho (REU)  
 F98            Patrick Kuschak (Research Assistant)  
 F97-W99      Daisuke Nagai (Independent Study, Phys 415)  
 Sum99         James Battat (REU)  
 F99-W00      Ted Way (UROP)  
 Sum01         Peter Dykema (Research Assistant)  
 Sum01–W04   Sara Kasun (Independent Study, Phys 415)  
 W02, W03     David Sabolish (Research Assistant)  
 W04            Vinayak Aggarwal (Research Assistant)  
 Sum04         Daniel Coupland (REU, Albion College)  
 Sum04         Stephen Floor (REU, University of Kansas)  
 Sum04         Glenn Lopez (Research Assistant)  
 Sum05         Benjamin Coupland (REU, Michigan Tech)  
 W05            Amanda Pitcher (Research Assistant)  
 Sum06         Daniel Barkley (REU, Kalamazoo College)

F06	Matthew Becker (Research Assistant)
Sum07	Daniel Barkley (REU – Kalamazoo College)
Sum07	Gregory Green (Research Assistant)
Sum08	Martin Areinmughare (REU, Lincoln University)
F08, W09	Gregory Green (Independent Study, Phys 415)
F08, W09	Rashad Jamal Brown (UROP)
F08, W09	Mitchell Newman Adler (UROP)
Sum 09	Gregory Green (Research Assistant)
Sum 09	Gary Foreman (Research Assistant)
F09, W10	Anastasia Klimchynskaya (UROP)
F09, W10	Charles Stibitz (UROP)
F09, W10	Andrew Burkhardt (UROP)
F09-W11	Srikanth Veluvolu (Independent Study, Phys 415)
F10	Bryce Anderson (Independent Study, Phys 415)
Sum 11	Ke Li (Research Assistant)
F11-W12	Vishaal Kalwani (UROP)
W12	Alan Coleman (Research Assistant)

### **Dissertation Committee Memberships**

YEAR	STUDENT : ADVISOR
1991	Deustua, Susanna : G. Bothun (Astronomy)
1991	Jurius, Diab : G. Bothun (Astronomy)
1991	Von Hippel, Theodore : G. Bothun (Astronomy)
1992	Krasberg, Marc (cand): J. Chapman
1995	Pildis, Rachel : J. Bregman (Astronomy)
1995	Schulman, Eric : J. Bregman (Astronomy)
1995	Crone, Mary : A. Evrard (Chair)
1995	Metzler, Christopher : A. Evrard (Chair)
1996	Teyssier, R. : J.-P. Chieze (Univ. Paris VII)
1997	Groom, Wendy : S. White (Univ. Cambridge, UK)
1997	Burkett, Kevin : M. Campbell
1997	Brieu, P. : G. Mamon and A. Evrard (co-chairs, Univ. Paris VII)
1998	Reichhardt, Charles : F. Nori
1998	Parriot, Joel : J. Bregman (Astronomy)
1999	Minske, Kelly : D. Richstone (Astronomy)
1999	Thacker, Robert : H. Couchman (U. Alberta)
1999	Mathiesen, Benjamin : A. Evrard (Chair)
2000	Xu, Qichun : B. Zhou
2001	Hansen, Kenneth : T. Gombosi (AOSS)
2001	Jarvis, Michael : G. Bernstein (Astronomy)
2001	Sheldon, Erin : T. McKay
2001	Rykoff, Eli : C. Akerlof
2001	Krasberg, Mark : J. Chapman
2002	Korreck, Kelly.: T. Gombosi (AOSS)

2002 Krick, Jessica : R. Bernstein (Astronomy)  
2002 Bialek, John : A. Evrard (Chair)  
2003 Tavares, Maritza : M. Mateo (Astronomy)  
2003 Chin, David : K. Riles  
2004 Koester, Benjamin : T. McKay  
2004 Stanek, Rebecca : A. Evrard (Chair)  
2004 Bell, Jared : T. Gombosi (AOSS)  
2004 Kneller, Eric : P. Van Keken (Geology)  
2005 Cameron, Scott : R. Bernstein (Astronomy)  
2005 Moorehead, Althea : F. Adams  
2006 Proszkow, Eva-Marie : F. Adams  
2006 Hao, Jiangang : T. McKay  
2007 Colucci, Janet : R. Bernstein (Astronomy)  
2007 Nord, Brian : A. Evrard (Chair)  
2008 Zhang, Yang: P. Van Keken (Geology)  
2009 Muratov, Sasha : O. Gnedin (Astronomy)  
2009 Becker, Adam : D. Hutnerer  
2009 Chen, Anbo : A. Evrard (Chair)  
2010 Ketchum, Jacob : F. Adams  
2010 Anderson, Michael : J. Bregman (Astronomy)  
2010 Erickson, Brandon : A. Evrard (Chair)  
2011 Van Wassenhove, Sandor : M. Volonteri (Astronomy)  
2011 Carides, Santiago : K Riles  
2012 Jaskot, Anne : S. Oey (Astronomy)  
2012 Slater, Colin : E. Bell (Astronomy)

*Updated 16 March 2012*