

CURRICULUM VITAE

Massimo Ricotti

1 Personal Information

Name: Massimo Ricotti	Address: University of Maryland
Citizenship: Italian	College Park, MD 20742-2421, USA
Department: Astronomy	Tel.: +01 (301) 405-5097
Rank: Assistant Professor	Fax: +01 (301) 314-9067
Appointment to Current Rank: 2005	e-mail: ricotti@astro.umd.edu

Education Background

2001 Ph.D. in Astrophysics, University of Colorado at Boulder, (Aug 1997-Dec 2001)
Dissertation: “Radiative Feedback from Galaxy Formation” Advisors: Prof. J.M. Shull and Prof. N.Y. Gnedin

1999 M.S. in Astrophysics, University of Colorado at Boulder, (Dec 1999)
Thesis: “The Evolution of the Effective Equation of State of the Intergalactic Medium”

1999 Introductory Parallel Computing Course, Urbana-Champaign (IL), (May 1999)

1996 Laurea (B.S. and M.S.) in Physics, University of Florence, Italy (Apr 1996)
Thesis: “Energy Dissipation in Interstellar Cloud Collisions” Advisor: Prof. A. Ferrara

Employment Background

2005- Assistant Professor, Dept. of Astronomy, University of Maryland, (Jan 2005-Present)

2002-2004 Research Associate, Institute of Astronomy, Cambridge (UK), (Sept 2002-Sept 2004)

2002 Research Associate, CASA, University of Colorado, (Jan-Aug 2002)

1997-2001 Graduate Research Assistant, University of Colorado at Boulder, (Aug 1997-Dec 2001)

1996-1997 Researcher, Arcetri Astrophysical Observatory, Florence, (Apr 1996-Jul 1997)

Temporary Visits of Research Institutes

2004 Visiting scientist, KITP, University of California, Santa Barbara (Nov-Dec 2004)

2004 Visiting scientist, NAOJ, Mitaka, Tokyo, Japan, (Oct-Nov 2004)

1996 Visiting scientist, University of Virginia, (Aug 1996)

Research Interests

Cosmology: Primordial black holes; physics of the early universe; dark matter properties

Galaxy Formation: Feedback from galaxy formation - the formation of the first galaxies; cosmological role of globular clusters

Intergalactic Medium: Reionization (by PopIII stars and black holes); thermal and chemical evolution of the Ly α forest

Interstellar Medium: Multi-phase structure of the interstellar medium, galactic winds

Computational Astrophysics: 1D and 3D radiative transfer codes; parallel computing on SGI/CRAY Origins2000/Origins3800; Hydro and N-body and cosmological codes [VH-1 (University of Virginia), SLH (Gnedin)]; implementation of “Goldrake” a 1D and 2D Shock-Capturing (TVD-MUSCL) hydro-code

Other Experience

Civil service, Florence, (1994-1995) served one year for the state (in lieu of military service), tutoring and taking care of children without families at “Opera Madonnina del Grappa”

Observing experience with the IR telescope TIRGO at Gornergrat (Switzerland), and with the radio telescope at Medicina (BO, Italy)

Lab experience: building and characterizing a device to produce turbulence, used for testing adaptive optics in Arcetri labs, Florence, Italy.

2 Research, Scholarly and Creative Activities

a) Books

1. **Ricotti, M.** 2002, “Radiative feedback from Galaxy Formation”, PhD Thesis, University of Colorado at Boulder, DAI-B 62/11, p. 5164, 183 pages
2. **Ricotti, M.** 1996, “ Energy dissipation in cloud-cloud collisions“, Master Thesis, University of Florence, Italy, 113 pages (Italian)

b) Articles in Refereed Journals

Errata are notlisted. Citations are from the NASA Astrophysics Data System on March 5th 2008 (total: 653 citations). The list is in chronological order.

- 1 **Ricotti, M.**, Ferrara, A., & Miniati, F. 1997, “Energy Dissipation in Interstellar Cloud Collisions”, ApJ, 485, 254-262
[17 citations]
- 2 Balbus, S. A., & **Ricotti, M.** 1999, “On Nonshearing Magnetic Configurations in Differentially Rotating Disks”, ApJ, 518, 784-787
[1 citations]
- 3 **Ricotti, M.**, Gnedin, N. Y., & Shull, J. M. 2000, The Evolution of the Effective Equation of State of the Intergalactic Medium, ApJ, 534, 41-56
[112 citations]
- 4 **Ricotti, M.**, & Shull, J. M. 2000, “Feedback from Galaxy Formation: Escaping Ionizing Radiation from Galaxies at High Redshift”, ApJ, 543, 548-558
[44 citations]
- 5 **Ricotti, M.**, Gnedin, N. Y.,& Shull, J. M. 2001, “FeedbackfromGalaxy Formation: Productionand Photodissociation of Primordial Intergalactic H₂”, ApJ, 560, 580-591
[53 citations]

- 6 **Ricotti, M.**, & Ferrara, A. 2002, “What Regulates the Dynamics of the ISM in the Galaxies?”, MNRAS, 334, 684-692
[4 citations]
- 7 **Ricotti, M.**, Gnedin, N. Y., & Shull, J. M. 2002, “The Fate of the First Galaxies. I. Self-Consistent Cosmological Simulations with Radiative Transfer”, ApJ, 575, 33-48
[56 citations]
- 8 **Ricotti, M.**, Gnedin, N. Y., & Shull, J. M. 2002, “The Fate of the First Galaxies. II. Effects of Radiative Feedback”, ApJ, 575, 49-67
[86 citations]
- 9 **Ricotti, M.** 2002, “Did Globular Clusters Reionize the Universe?”, MNRAS, 336, L33-L37
[16 citations]
- 10 **Ricotti, M.** 2003, “Dependence of the Inner Dark Matter profile on the Halo Mass”, MNRAS, 344, 1237
[48 citations]
- 11 **Ricotti, M.**, & Ostriker, J. P., 2004, “Reionisation, chemical enrichment and seed black holes from the first stars: is Population III important?”, MNRAS, 350, 539
[56 citations]
- 12 **Ricotti, M.**, & Ostriker, J. P., 2004, “X-ray Preionisation Powered by Accretion on the First Black Holes. I: a Model for the WMAP Polarisation Measurement”, MNRAS, 352, 547
[67 citations]
- 13 **Ricotti, M.**, Haehnelt, M. G., Pettini, M. & Rees, M. J. 2004, “Have we detected one of the sources responsible for an early reionisation of the Universe?”, MNRAS, 352, 21L
[16 citations]
- 14 **Ricotti, M.** & Wilkinson, M. I. 2004, “On the Origin of Dark Matter Cores in Dwarf Galaxies”, MNRAS, 353, 867
[6 citations]
- 15 **Ricotti, M.**, Ostriker, J.P., & Gnedin, N.Y. 2005, “X-ray Preionisation Powered by Accretion on the First Black Holes. II: Cosmological Simulations and Observational Signatures”, MNRAS, 357, 207
[19 citations]
- 16 **Ricotti, M.**, & Gnedin, N. Y. 2005, “Formation Histories of Dwarf Galaxies in the Local Group”, ApJ, 629, 259
[26 citations]
- 17 Ferrara, A. & **Ricotti, M.** 2006, “Winds and Infalling Gas in Lyman Break Galaxies”, MNRAS, 373, 571
[6 citations]
- 18 **Ricotti, M.**, Pontzen, A. P. & Viel, M. 2007, “Is the Concentration of Dark Matter Halos at Virialization Universal?”, MNRAS, 663, L53
[2 citations]
- 19 **Ricotti, M.** 2007, “Bondi Accretion in the Early Universe”, ApJ, 662, 53
[2 citations]

- 20 Mack, K.J., Ostriker, J.P. & **Ricotti, M.** 2007, “Growth of structure seeded by primordial black holes”, *ApJ*, 665, 1277
[7 citations]
- 21 Ricotti, M., Ostriker, J.P., & Mack, K.J. 2008, “Effect of non-evaporating Primordial Black Holes on the Cosmic Ionization History”, *ApJ*, 680, 829
[3 citations]
- 22 Ricotti, M., Gnedin, N. Y., & Shull, J. M. 2008, “The Fate of the First Galaxies. III. Dwarf Primordial Galaxies and their Impact on the Intergalactic Medium”, *ApJ*, 685, 21
[0 citations]
- 23 Ricotti, M. 2008, “Late Gas accretion onto Primordial Minihalos: a Model for Leo T dark galaxies and Extragalactic High-Velocity Clouds”, *MNRAS*, xxx, xx

Papers in press...

- 24 Bovill, M. & **Ricotti, M.** 2008, “Pre-reionization Fossils, Ultra-faint Dwarfs and the Missing Galactic Satellite Problem”, *ApJ*, in press

Papers in preparation...

- 24 **Ricotti, M.** & Ostriker, E. 2009, “Linking the Formation of Globular Clusters and AGN Activity”, in preparation
- 25 **Ricotti, M.**, & Kökert, F. 2009, “X-rays from Intermediate mass black holes in the First Galaxies”, in preparation

d) Other Articles (Unrefereed)

- 1 “Feedback from Galaxy Formation: Production and Photodissociation of Primordial Intergalactic H₂”, **Ricotti, M.**, Gnedin, N. Y., & Shull, J. M. 2001, ASP Conference Series, M. Umemura, and H. Susa eds., Vol. 222, 391-396 [1 citations]
- 2 “Dwarf Sphs/First-galaxies connection”, **Ricotti, M.** 2003, Kluwer Academic Press, M. Putman & J. Rosenberg, eds., Vol. 281, 193 [3 citations]
- 3 “Reionization -The role of Globular Clusters”, **Ricotti, M.** 2004, ASP Conference Series, H.J.G.L.M. Lamers, L.J. Smith, and A. Nota eds., Vol. 322,509 [2 citations]
- 4 “On the origin of dwarf spheroidal galaxies. Clues from cosmological simulations”, **Ricotti, M.** & Gnedin, N. Y. 2005, IAU Colloq. 198: “Near-fields cosmology with dwarf elliptical galaxies” [0 citations]
- 5 “Effects of radiation backgrounds on the formation of Population III stars” **Ricotti, M.** 2008, AIP Conference: “First Stars III”, 990, 364 [0 citations]

e) Talk Presented

The list is in inverse chronological order.

Invited Talks and Reviews at Professional Meetings

1. “Theoretical Cosmology”, Invited talk (15 min) at the CRESST meeting at NASA Goddard, Nov 21 2008

2. X-rays from Primordial Black holes and their effects on the CMB
Invited talk (30 min) at the conference “Far Away: Light in the young universe at redshift beyond three XXIVe IAP Colloquium”, Paris, France, July 7-11 2008
3. Effects of Radiation Backgrounds on the Formation of Population III stars
Invited talk (30 min) at the conference “First Stars III”, Santa Fe, NM, USA, July 16-20 2007
4. The First Galaxies and the Quest for their Fossils
Invited talk (30 min) at the conference “HI survival through Cosmic Times”, Spineto (SI), Italy, June 11-15 2007
5. Black holes and the (pre-)Reionization Process
Invited talk (30 min) at the conference “Reionizing the Universe: The Epoch of Reionization and the physics of the IGM”, Groningen Netherlands, June 21-July 1 2005
6. Invited to the “Galaxy and intergalactic medium” program, KITP, UCSB, Santa-Barbara, California, USA, November 16-December 11 2005
7. The cosmological impact of the first galaxies
Invited talk (30 min) at the “Post-Nishinomiya-Yukawa” International Symposium, University of Kyoto, Japan, 3-7 November 2004
8. Early reionization by X-rays
Invited talk (1 hour) at workshop in Cosmic Ray Institute, Tokyo, Japan (host: M. Fukugita), 9 November 2004
9. Participant to the Plumian 300 conference, IoA, Cambridge, UK, 5-9 July 2004
10. Re-ionisation by X-rays
Invited talk (30 min) at the Star Formation and Re-ionisation in the Universe workshop, UCL, London, UK, 22 April 2004
11. Reionization: the role of Globular Clusters
Invited talk (30 min) at the conference “The Formation and Evolution of Massive Young Star Clusters”, Cancun, Mexico, 17-21 November 2003
12. Radiative Feedback from Galaxy Formation: the fate of the first galaxies
Invited review (45 min) at the conference “The Outer Edges of Dwarf Irregular Galaxies: Stars and Gas”, Lowell Observatory, Flagstaff(AZ), USA, 9-11 October 2002
13. Feedback from Galaxy Formation: Production and Photodissociation of Primordial Intergalactic H₂
Invited talk (30 min) at the conference “The Physics of Galaxy Formation”, Tsukuba University, Japan, 3-7 July 2000

Colloquia and Seminars

- 1 Fossils of the first galaxies in the Local Group
Colloquium (1 hour), *UMBC, Physics department*, Baltimore MD, 12 November 2008
- 2 Fossils of the first galaxies in the Local Group
Colloquium (1 hour), *Naval Research Laboratory*, Washington DC, 23 October 2008
- 3 Fossils of the first galaxies in the Local Group
Seminar (1 hour), *Fermilab*, Batavia IL, 29 September 2008

- 4 Late gas accretion onto primordial minihalos: a model for Leo T and extragalactic CHVCs
Seminar (1 hour), *Kavli Institute of Theoretical Cosmology*, U. of Chicago, 26 September 2008
- 5 Late gas accretion onto primordial minihalos: a model for Leo T and extragalactic CHVCs
Colloquium (1 hour), *Cornell University*, Astronomy and Space Sciences, 18 September 2008
- 6 The First Galaxies and the Quest for their Fossils
Colloquium (1 hour), *University of Virginia and NRAO* colloquium, 21 Feb 2008
- 7 Primordial Black Holes and their effect on the cosmic ionization history
Colloquium (1 hour), *Virginia Tech*, Physics dept., 8 Feb 2008
- 8 Primordial Black Holes and their effect on the ionization history
Seminar (1 hour), *Princeton University*, Gravity Group, Physics, 09 Nov 2007
- 9 Primordial Black Holes and their effect on the ionization history
Colloquium (1 hour), *George Mason University*, Astronomy dept., 18 Oct 2007
- 10 Primordial Black Holes and their effect on the ionization history
Seminar (1 hour), *Harvard University*, ITC seminar at CfA, 17 May 2007
- 11 Feedback in the early Universe and X-ray reionization
Colloquium (1 hour), *Case Western University*, USA, 31 October 2006
- 12 Sources of Reionization
Colloquium (1 hour), *Pen State University*, Astronomy dept., 25 March 2006
- 13 The first galaxies
Colloquium (1 hour), *University of Tokyo*, Japan (host: Y. Suto), 8 November 2004
- 14 The first galaxies
Colloquium (1 hour), *Tsukuba University*, Astronomy dept., Japan, 13 October 2004
- 15 The first galaxies
Colloquium (1 hour), *National Astronomical Observatory*, Mitaka, Japan, 20 October 2004
- 16 The cosmological impact of the first galaxies
Colloquium (1 hour), *University of Durham*, UK (host: C. Frenk), 16 June 2004
- 17 The cosmological impact of the first galaxies
Colloquium (1 hour), *University of Maryland*, USA, 22 February 2004
- 18 X-ray preionization
Seminar (1 hour), *University of Oxford*, UK (host: G. Bryan), 28 October 2003
- 19 X-ray preionization
Seminar (1 hour), *IoA, Cambridge*, UK, Jul 2003
- 20 Radiative feedback in the early universe: clues on the origin of Dwarf Spheroidals
Colloquium (1 hour) *Dept. of Astronomy, University of Washington*, USA, 29 May 2003
- 21 The profile of dark matter halos from dwarfs to cluster
Seminar (1 hour) *Dept. of Astronomy, University of Washington*, USA, 27 May 2003

- 22 Dependence of the Inner DM Profile on the Halo Mass Seminar (1 hour), *University of Colorado, Boulder, USA*, 16 May 2003
- 23 Radiative feedback in the early universe
Colloquium (1 hour), *Dept. of Astronomy, University of Texas Austin, USA*, 26 February 2003
- 24 The profile of dark matter halos from Dwarfs to Clusters
Seminar (1 hour), *Dept. of Astronomy, University of Texas Austin, USA*, 25 February 2003
- 25 Radiative Feedback from Galaxy Formation
Seminar (1 hour), *IoA, Cambridge, UK*, 6 November 2002
- 26 Radiative Feedback from Galaxy Formation: the fate of the first galaxies
Colloquium (1 hour), *University of Chicago, USA*, 16 January 2002
- 27 The fate of the first galaxies
Seminar (1 hour), *Fermilab, Batavia IL*, 14 January 2002

Contributed Talks at Professional Meetings

- 1. Effects of reionization feedback on dwarf galaxies evolution
Contributed talk (20 min) at the 255 IAU meeting “Low-Metallicity Star Formation: From the First Stars to Dwarf Galaxies”, *Rapallo, Genova - Liguria, Italy*, June 16-20, 2008
- 2. X-ray Preionization
Contributed talk (20 min) at 17th annual Astrophysics Conference in Maryland, “Radiation Backgrounds from the first stars, galaxies and black holes”, *U. of Maryland, College Park, MD USA*, October 9-11 2006
- 3. Formation Histories of Dwarf Galaxies in the Local Group
Contributed talk (20 min) at the IAU colloquium No. 198, “Near-field cosmology with dwarf elliptical galaxies”, *Les Diablerets, Switzerland*, 14 - 18 March 2005
- 4. Pre-ionization by X-rays
Contributed talk (30 min) at the European Research and Training Network meeting, *Ile d’Oleron, France*, 6-12 September 2003
- 5. Dwarf Sphs/First-galaxies connection
Contributed talk (30 min) at EARA Workshop on “Star Formation in Dwarf Galaxies” *IoA, Cambridge, UK*, 3-4 April 2003
- 6. Dwarf Sphs/First-galaxies connection
Contributed talk (30 min) at the conference “The IGM/Galaxy Connection - The Distribution of Baryons at $z=0$ ”, *NCAR, Boulder (CO), USA*, 8-10 August 2002
- 7. Radiative Feedback from Galaxy Formation
Contributed talk (30 min) at the conference “Early Cosmic Structures and the End of the Dark Ages”, *Elba Island, Italy*, 4-7 June 2002
- 8. Participant at the conference “The First Generation of Cosmic Structures”, *CfA, Harvard, USA*, 15-18 May 2000
- 9. The equation of state of the intergalactic medium
Contributed talk at the workshop “The Inter-Galactic Medium and Large Scale Structure”, *Technion-ITT, Haifa, Israel*, July 1999

Posters and Abstracts

1. Massive Black Hole Mergers

Alicea-Munoz, E., Baker, J., Centrella, J., Laguna, P., Miller, M. C., Ricotti, M., Contributed poster at AAS Meeting in Washington DC, (Jan 10, 2006)

2. Feedback from Galaxy Formation: Production and Photodissociation of Primordial Intergalactic H₂

Awarded poster at the conference “The Physics of Galaxy Formation”, Tsukuba University, Japan, 3-7 July 2000

i) Contracts and Grants

Research grants

Only grants/proposals for which Ricotti is PI or Co-I (i.e., not an unpaid collaborator) are listed.

2007-2010, PI, “Formation of the First Galaxies and Black Holes Regulated by Radiative Feed Back”, (NASA Beyond Einstein), \$296,000

2007-2010, PI, Collaborative Proposal: Toward Petascale Simulations of Early Cosmic Evolution, (NSF Astronomy and Astrophysics Research Grants) \$57,476

Postdoctoral and graduate student grants

2002-04 IoA, Cambridge PPARC theory rolling grant

2000 University of Colorado “Small Dean Grant”

1999 University of Colorado “Small Dean Grant”

Travel grants

2002 AAS Travel Grant

j) Fellowships, Prizes and Awards

NOVA fellowship/Leiden (declined) (2002)

CITA fellowship (declined) (2002)

Poster Award, Tsukuba University, Japan, (Summer, 2000)

University of Colorado “Differential-tuition Fellowship” (1997 and 2000)

k) Editorships, Editorial Boards, and Reviewing Activities

I have reviewed several manuscripts for *Astrophysical Journal*, *Astrophysical Journal letters*, *Monthly Notices of the Royal Astronomical Society*, *Astronomy and Astrophysics*, *Nature* and *Science*.

3 Teaching and Advising

a) Courses Taught

i. General/introductory

Spring 2009 ASTR415 “Computational Astrophysics”, 3 credits

Fall 2008 ASTR340 “Origin of the Universe”, 3 credits, 49 students

Fall 2007 ASTR340 “Origin of the Universe”, 3 credits, 38 students

Spring 2007 ASTR415 “Computational Astrophysics”, 3 credits, 10 students

ii. Specialized/advanced

Spring 2008 ASTR688 “Cosmology”, 3 credits, 14 students

Fall 2006 ASTR601 “Radiative processes” 3 credits, 9 students (CORE)

Spring 2006 ASTR688 “Cosmology”, 3 credits, 11 students

Fall 2005 ASTR601 “Radiative processes” 3 credits, 9 students (CORE)

iv. Independent Study, Tutorial, Internship Supervision

Fall 2007 ASTR898, “Pre-candidacy Research”, 2 students

Fall 2007 ASTR699, “Special Problems in Advanced Astronomy”, 1 student

Spring 2007 ASTR699, “Special Problems in Advanced Astronomy”, 1 student

Spring 2006 ASTR699, “Special Problems in Advanced Astronomy”, 1 student

Fall 2005 ASTR699, “Special Problems in Advanced Astronomy”, 1 student

Summer 2005 ASTR699, “Special Problems in Advanced Astronomy”, 2 students

b) Courses or Curriculum Development

Spring 2006 Lectures and notes design for a new graduate level course on Cosmology: ASTR688R

c) Manuals, Notes, Software, Webpages, and Other Contributions to Teaching

1 Review and grading of essays (IoA, University of Cambridge, UK, 2003)

2 Web pages developed for classes:

<http://www.astro.umd.edu/~ricotti/NEWEB/teaching/ASTR601.html>

<http://www.astro.umd.edu/~ricotti/NEWEB/teaching/ASTR688.html>

<http://www.astro.umd.edu/~ricotti/NEWEB/teaching/ASTR415.html>

http://www.astro.umd.edu/~ricotti/NEWEB/teaching/ASTR340_07.html

3 Handwritten notes developed for ASTR688

4 Notes reformatted for computer presentation for ASTR415

f) Advising: Research Direction

i. Undergraduate

Summer 2005 Manan Jani (Blair Magnet student): “Mapping the Local Volume” (Jun-Oct2005)

ii. Doctoral

2008/09 2nd-year project advisor: Jamie Cohen, Dept. of Astronomy University of Maryland

2008- PhD advisor: Emil Polinsesky, Dept. of Astronomy University of Maryland

2007- PhD advisor: KwangHo Park, Dept. of Astronomy University of Maryland

2006- PhD advisor: Mia Bovill, Dept. of Astronomy University of Maryland

2007/08 2nd-year project advisor: Emil Polinsesky, Dept. of Astronomy University of Maryland

2006/07 2nd-year project advisor: KwangHo Park, Dept. of Astronomy University of Maryland

Summer 2005 PhD advisor: Franziska Koeckert, Dept. of Astronomy University of Maryland

2005/06 2nd-year project advisor: Mia Bovill, Dept. of Astronomy University of Maryland

2003/04 Advisor to the “Earastargal fellow” David Rapetti, IoA, University of Cambridge, UK

g) Extension Activities

Local (UMD) research talks

- 1 “Problems in Cosmology” (30 min) ASTR695 Seminar (Dec 1st, Fall 2008)
- 2 “Problems in Cosmology” (30 min) ASTR695 Seminar (Fall 2007)
- 3 “Problems in Cosmology” (30 min) ASTR695 Seminar (Spring 2007)
- 4 “Dark matter halos” (1 hour) Galaxy Club Seminar (Fall 2006)
- 5 “Problems in Cosmology” (30 min) ASTR695 Seminar (Spring 2006)
- 6 “What I do for a living..”(1 hour) Theory lunch seminar (Fall 2005)

4 Service

a) Professional

i. Peer reviewing of articles

Regular reviewer of articles for Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, Astronomy and Astrophysics, Nature and Science.

ii. Reviewing activities for federal agencies

2008 Member, NASA ATP review team

2008 Member, NASA SMEX (Explorer) Science review team

v. International activities

2003- Member of International Astronomical Union (IAU)

2005- Member of American Astronomical Society (AAS)

vi. Organization of scientific meetings

2009 Local organizing Committee for the workshop: “Shedding Light on Dark Matter”, *UMD, College Park*, April 2-4 2009

2002 Local organizing Committee for the conference: “The IGM/Galaxy Connection - The Distribution of Baryons at $z=0$ ”, *NCAR, Boulder (CO)*, 8-10 August 2002

vii. Paid consultancies

2007/08 Consultant for Martin Cannon

b) University

i. Departmental

2008/09 Chair of Second Year Project Committee

2008 Qualifier Committee (Summer 2008)

2007/08 Member of Second Year Project Committee

2007 Qualifier Committee (Summer 2007)

2007 Colloquia organizer (Spring 2007)

2006 Colloquia organizer (Fall 2006)

2006 Qualifier Committee (Summer 2006)

2005/06 Chair of Graduate admissions Committee

2004/05 Co-chair of Graduate admissions Committee

ii. Thesis/dissertation Examining committees

2008 John C. Vernaleo (U. of Maryland, Thesis defense), May 15 2008

2008 Barbara Mattson (U. of Maryland, Thesis defense), April 11 2008

2007 Rahul Shetti (U. of Maryland, Thesis defense), September 2007

2007 Rachel Kuzio de Naray (U. of Maryland, Thesis defence), July 12 2007

2006 Carl Gross (U. of Maryland, Thesis proposal), November 13 2006

2006 Rahul Schetty (U. of Maryland, Thesis proposal), May 18 2006

2005 Robert Piontek (U. of Maryland, Thesis defense), September 23 2005

c) Community, State, National

Public Talks

“Cosmology”, U. of Maryland Observatory Open House, September 20 2005

“Primordial Black Holes”, U. of Maryland Observatory Open House, September 5 2008

Media Contacts

Featured article on *New Scientist* “Did the Big Bang spawn trillion of black holes?”, by David Shiga (Friday September 14th 2007)

References

Prof. Andrea Ferrara

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