Evan Santos Scannapieco **December 15, 2016**

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Research Focus

AGN Feedback: numerical modeling, direct constraints from Sunyaev-Zel'dovich measurements
First Stars: modeling subgrid pollution of pristine gas, abundance signatures in the MW halo
Galaxy Outflows: driving, evolution, multi-phase structure, cosmic impact
Supernovae: impact on galaxy formation, pair-instability supernovae, type Ia progenitor systems
Turbulence: supersonic mixing, impact on observations of interstellar & circumgalactic media

Education

1996-2001	UC Berkeley	Physics MS (adv. Joseph Silk) & Ph.D. (adv. Marc Davis)
	Dissertation:	The Role of Heating and Enrichment Structure Formation
1992-1996	Harvard Univ.	Physics A.B., *magna cum laude*, 1996

Academic Positions

5/2013-pres	Associate Professor	ASU School of Earth and Space Exploration (SESE)
2007-13	Assistant Professor	ASU School of Earth and Space Exploration (SESE)
2003-07	Postdoctoral Member	UCSB Kavli Institute for Theoretical Physics
2001-03	NSF Distinguished International Postdoctoral Research Fellow	
	Arcetri Observatory, Italy, and Paris Institute of Astrophysics, France	

Publication Summary

• 93 refereed publications, 162 total publications
• Citations: 3201 ADS, 4070 Google Scholar; h-index: 34 ADS, 36 Google Scholar.

Research/Education Grants

	Total: over $2.1M in research grants, and over $0.4M in educational grants
2015-2018	NASA Theory: The Next Generation of Tools for Simulating Galaxy Outflows
	Awarded Amount: $497,228 (100% Credit)
2015-2018	NSF-IRES: Measuring Cosmic Magnetism with the Low Frequency Radio Array
	Awarded Amount: $248,212 (100% Credit)
2014-2017	NSF-AAG: Using the Sunyaev-Zel'dovich Effect to Measure AGN Feedback
	Awarded Amount: $498,199 (100% Credit)
2011-2014	NSF-AAG: Simulating Galaxy Formation with Fewer than a Trillion Zones
	Awarded Amount: $486,798 (100% Credit)
2011-2014	NASA Theory: Colliding And Merging White Dwarfs
	Awarded Amount: $366,000 (50% Credit)
2010-2014	NSF-IRES: Studying Galactic and Intergalactic Magnetism with LOFAR
	Awarded Amount: $149,408 (100% Credit)
2009-2012	NASA Theory: Self-Enrichment of Primordial and Present-day Star Clusters
	Awarded Amount: $474,437 (50% Credit)
2008-2011	NSF-AAG: Constraining Double Degenerate Mergers
	Awarded Amount: $501,260 (50% Credit)
2001-2003	NSF-Distinguished International Postdoctoral Research Fellowship
	Awarded Amount: $93,200 (100% Credit)

Awards & Fellowships

2007	Ontario Research and Innovation Optical Network (ORION), Discovery Award of Merit
2006	Aspen Center for Physics, Martin & Beate Block Award
2001	NSF-Distinguished International Postdoctoral Research Fellowship
2001	UC Berkeley, Elizabeth Uhl Award
1999-2001	UC Berkeley, Chancellors Opportunity Predoctoral Fellowship
1996-1999	National Science Foundation Graduate Fellowship
1996	UC Berkeley, Roy L. Frank Fellowship

Recent Computer Allocations

2017 NSF: Simulating The Evolution of The Elements Generated by the First Stars
3.5M CPUh Stampede-II (UT)
2016-2017 NASA: Simulating the Properties of Atomic Turbulent Media
5.2M CPUh Pleiades (NAS)
2015-2016 NASA: Simulating the Properties of Atomic Turbulent Media
1.2M CPUh Pleiades (NAS)
2015-2016 XSEDE: Simulating the Atomic Properties of Turbulent Astrophysical Media
3.1M CPUh Comet (UCSD) + 1.9M CPUh Stampede (UT)
2015-2016 NASA Advanced Supercomputing: Wolf-Rayet contamination of molecular clouds
600k CPUh Pleiades (NAS) PI: Steven Desch, CoI: ES
2015-2016 XSEDE: Simulating Outflows from Starburst Galaxies
2.4M CPUh Stampede (UT)
2014-2015 XSEDE: Turbulent Mixing in Magnetized media
3.8M CPUh Stampede (UT)
2013-2014 Modeling the Formation of Globular Clusters by High Redshift Galaxy Outflow
2.0M CPUh Stampede (UT)

Summary of Courses Taught

AST 111: Introduction to Astronomy I: Discovering the Solar System (2008, 2009, 2013)
AST 112: Introduction to Astronomy II: Stars, Galaxies, and Cosmology (2011, 2012, 2015)
AST 421: Upper Division Astrophysics I: Stars and Stellar Systems (2012, 2016)
AST 422: Upper Division Astrophysics II: Stars and Stellar Systems (2009, 2013, 2016)
AST 521: Graduate Level Radiative Processes in Astrophysics (2010)
AST 531: Graduate Level Galactic Dynamics (2007, 2011, 2015)
GLG 591: High-Performance Computation for Space and Environmental Flows (2010)

Recent Postdoctoral Advisor To:

Mohammad Safarzadeh	2016-pres	
Sharanya Sur	2012-2015	Now Asst. Professor, Indian Institute of Astrophysics,
Liubin Pan	2009-2012	Now a Harvard Clay Prize Postdoctoral Scholar
Themis Athanassiadou	2009-2012	Now at European Grid Infrastructure

Recent Graduate Advisor To:

Edward Buie	1st year PhD Student	
J'Neil Cottle	1st year PhD Student	
Richard Sarmento	Expected PhD in 2018	
Alexander Spacek	Expected PhD in 2017	
Mark Richardson	PhD in 2014	Now a postdoc at Oxford University
William Gray	PhD in 2012	Now a postdoc at the University of Michigan

Cody Raskin	PhD in 2011	Now staff at Lawrence Livermore National Lab

Recent Graduate Student Awards:

Edward Buie	2016	ASU Doctoral Enrichment Fellowship
Mark Richardson	2013	Balzan Visiting Junior Research Fellowship
	2011-2014	National Sciences and Engineering Research Council of Canada Grant
Cody Raskin	2010	NASA Earth and Space Science Fellowship
	2010	Annual Meeting of Nobel Laureates, Invitee

Recent Undergraduate Advisor To:

Kezman Saboi	Expected Grad 2018	
Dustin Nguyen	Expected Grad 2017	
Luis Nieblas	Expected Grad 2017	
Stephanie Stawinski	Expected Grad 2017	
Trevor Van Engelhoven	Expected Grad 2017	
Michael Busch	Grad 2016	Now a Univ. of Maryland PhD Student
James Cornelison	Grad 2015	Now a Harvard University PhD Student
Diane Van Hoy	Grad 2015	Now a teacher in the Mesa Public Schools
Reid Landeen	Grad 2015	Now working at the Boston Museum of Science
Miguel Bueno	Grad 2014	Now an ASU PhD Student
Stuart Spackman	Grad 2014	Now a CU Boulder PhD Student
Amanda Wilber	Grad 2014	Now a University of Hamburg PhD Student
Jon Van der Water	Grad 2013	Now Lead flight director Challenger Space Cent.
Michael Falcon	Grad 2013	Now a Test engineer at Freescale Semiconductor
Zelong Yu	Grad 2013	Now a Univ. Maryland PhD Student
Devon Powell	Grad 2013	Now a Stanford PhD Student
Holly Hutchison	Grad 2013	Now an ISS Payload Integration Mngr., Boeing

University and Department Service

2015-pres	SESE Awards Committee, ASU (Chair since Fall 2016)
2016-pres	SESE Promotion and Tenure Committee
2015-pres	University Level Working Group for Research Computing
2014-2015	SESE Undergraduate Curriculum Committee
2011-2013	Chair of SESE Computing Committee
2009-2014	Advanced Computing Center Steering Committee.
2010-2011	Articulation Task Force
2008-2011	Graduate Recruitment Committee, SESE, ASU
2008-09	Committee to establish the ASU Earth and Space Exploration BS degree.
2007-pres	Physics Department Graduate Faculty
2007-08	Interdisciplinary Science and Technology Building IV Planning Committee

National and International Service:

2016	Chair, NASA Theory Grant Panel
2016	Grand Award Judge, Intel International Science and Engineering Fair
2016	Panelist, NSF Astronomy and Astrophysics Grants Program
2015	Panelist, NSF International Research Experience for Students (IRES) Program
2014	Panelist, NSF Mid-Scale Innovations Program (MSIP) Panelist
2014	External Reviewer, UK Royal Society University Research Fellowships
2013	Panelist, NSF, Astronomy and Astrophysics Grants Program

2012	Chair, NASA Theory Grant Panel
2011-pres	External Reviewer, Korean Ministry of Ed., Sci., & Tech. Grants
2011	Panelist, NSF Astronomy and Astrophysics Grants Program
2009-2012	Judge, Student Cluster High-Performance Computation Competition
2010	Panelist, NSF Astronomy and Astrophysics Grants Program
2009	Chair, NSF Astronomy and Astrophysics Grants Program
2009-pres.	External Reviewer for Israel Science Foundation Science Grants
2008-2012	External Reviewer for Dutch National Vidi Research Incentives
2008	Chair, NSF Astronomy and Astrophysics Grants Program
2007	Panelist, NSF Astronomy and Astrophysics Grants Program
2007	Lecturer, Research Science Institute (REU for talented HS Students)
2005	Panelist, NSF Astronomy and Astrophysics Grants Program
2004-pres.	External Reviewer for US-Israeli Binational Science Foundation

2014-pres.	Reviewer for Chemical Engineering Science
2013-pres.	Reviewer for Nature
1997-pres.	Reviewer for The Astrophysical Journal
1997-pres.	Reviewer for The Monthly Notices of the Royal Astronomical Society
1997-pres.	Reviewer for Physical Review D

Conference/Workshop Organization

3/2012	Chair of ASU hosted conference on Turbulence in Cosmic Structure Formation (http://cosmicturbulence2012.events.asu.edu).
10/2005	Helped to coordinate KITP conference & program on Galaxy-IGM interactions (Chairs: A. Ferrara, P. Madau, and M. Steinmetz)

Selected Invited Lectures, Addresses, and Colloquia Since 2010

8/2016	Intracluster Medium Workshop, Fine Center, Univ. Minnesota
8/2016	Cloudy: Emission Lines in Astrophysics Symposium, Mexico City
7/2016	The Cold Universe KITP Workshop, Santa Barbara, CA
4/2016	Simons Symposium on Galactic Superwinds, Schloss Elmau, Germany
8/2015	IAU FM 18: Scale-free Processes in the Universe, Honolulu, HI
8/2015	IAU FM 10: Stellar Explosions in an Ever-changing Environ., Honolulu, HI
7/2015	The Metal Enrichment of Diffuse Gas in the Universe Conf., Sexten, Italy
9/2014	Theoretical Astrophysics Colloquium, University of Arizona, Tucson, AZ
6/2014	Gravity's Loyal Opposition KITP Workshop, Santa Barbara, CA
3/2014	Simons Symp., Galactic Super Winds: Beyond Phenomenology, Puerto Rico
2/2014	Near-field Deep-Field Connection, UC Irvine, CA
1/2014	Theoretical Astrophysics Seminar, UC Berkeley, CA
10/2013	Metal Production & Distribution in a Hierarchical Universe, Meudon, France
7/2013	The Origin of the Hubble Sequence, IAP, Paris, France
7/2013	CGM-Galaxy Interface Workshop, Leiden, Netherlands
9/2012	ASU Astrobiology Coffee Seminar, Tempe, AZ
7/2012	Galactic Winds of Change Conf., Sexten, Italy
2/2012	UCB Astronomy Dept. Cosmology Seminar, Berkeley, CA
2/2012	KIPAC Cosmology Seminar, Stanford, CA
2/2012	New Horizons in Computational Astrophysics, Davos, Switzerland
1/2012	The Physics of Astronomical Transients, Aspen, CO
7/2011	Binary Paths to Type Ia SN Explosions, IAU 281, Padova, Italy
6/2011	A New Era for SZ Science, Santander, Spain
6/2011	Advances in Computational Astrophysics, Cefalu, Italy

3/2011	Galaxy Cluster Workshop, Santa Barbara, CA
3/2011	Extragalactic Giant Magellan Telescope Workshop, College Station, TX
8/2010	Physics of the Intracluster Medium, MSU, Ann Arbor, MI
7/2010	COSPAR Scientific Assembly, Cosmic Feedback, Bremen, Germany
7/2010	Phys. & Astrophys., of Neutron Stars and Black Holes, Bremen, Germany
3/2010	SNOWCLUSTER workshop, Snowbird, UT
2/2010	Formation and Evolution of Black Holes, Aspen, CO
2/2010	The High Redshift Universe: A Multi-Wavelength View, Aspen, CO

Selected Public / Interdisciplinary Talks Since 2010

7/2016	Kavli Institute for Theoretical Physics, Chalk Talk
3/2016	Saguaro Astronomy Club
2/2016	ASU Night of the Open Door
1/2016	Building a Research Program Panelist Discussion
3/2013	West Valley Astronomy Club
3/2012	ASU Introduction to High-Performance Computation Seminar
10/2011	ASU Nonlinear Dynamics, Environ. Sci., and Sustainability Seminar
10/2010-2016	Earth and Space Exploration Day
10/2010	Arizona Science Center
3/2010	Saguaro Astronomy Club
1/2010	ASU Introduction to Parallel Computing Seminar

Extended Invited Visits

7/16	Kavli Institute for Theoretical Physics, UC Santa Barbara, CA
6/14	Kavli Institute for Theoretical Physics, UC Santa Barbara, CA
1/14-5/14	UC Berkeley, Astrophysics Department / Lawrence Berkeley National Lab
2/11	Kavli Institute for Theoretical Physics, UC Santa Barbara, CA
7/10	Aspen Center for Physics, Aspen, CO
7/08	Aspen Center for Physics, Aspen, CO
6/08	Max Plank Institute for Astrophysics, Garching, Germany
6/06	Queens University Physics Department, Kingston, Canada
5/04	Canadian Institute of Theoretical Astrophysics, Toronto, Canada
5/03-6/03	Strasbourg Observatory, Strasbourg, France
1/03-3/03	Los Alamos National Laboratory, Los Alamos, NM
6/00-8/00	European Southern Observatory, Garching, Germany
1/00-2/00	Kavli Institute for Theoretical Physics, UC Santa Barbara, CA
5/99-8/99	University of Rome "Tor Vergata," Rome, Italy
2/99-4/99	Oxford University, Oxford, United Kingdom
5/98-8/98	Paris Astrophysics Institute, Paris, France

Languages

Bilingual in English and Spanish, Fluent in French and Italian

References

Andrea Ferrara	Scuola Normale Superiore	andrea.ferrara@sns.it	+39 050 509067
Eve Ostriker	Princeton Univ.	eco@astro.princeton.edu	+1(609) 258-7240
Joseph Silk	Johns Hopkins Univ.	jsilk@jhu.edu	+1(410)-516-2881
Volker Springel	Heidelberg Univ.	volker.springel@h-its.org	+49 (0)6221 533-241

Publications

A. Refereed Astrophysical Publications

(underline indicates ASU PhD student and *italics* indicates ASU postdoc working under my supervision)

[A93] Numerical Simulation of Star Formation by the Bow Shock of the Centaurus A Jet
C. L. Gardner, J. R. Jones, **E. Scannapieco,** & R. A. Windhorst, 2016, *Astrophysical Journal*, in press (arXiv:1610.02123)

[A92] Finding Fossil Evidence of AGN Feedback in WISE-Selected Galaxies by Measuring the Thermal Sunyaev-Zel'dovich Effect with the Atacama Cosmology Telescope
A. Spacek, **E. Scannapieco,** S. Cohen, B. Joshi, & P. Mauskopf 2016, *Astrophysical Journal*, in press, (arXiv:1610.02068)

[A91] Following the Cosmic Evolution of Pristine Gas I: Implications for Milky Way Halo Stars
R. Sarmento, **E. Scannapieco**, & L. Pan 2016, *Astrophysical Journal*, in press, (arXiv:1611.00025)

[A90] On the Formation of Molecular Clumps in QSO Outflows
A. Ferrara, & **E. Scannapieco**, 2016, *Astrophysical Journal*, 833, 46, pp. 16

[A89] The Impact of Unresolved Turbulence on the Escape Fraction of Ly-Continuum Photons
M, Safarzadeh, & **E. Scannapieco** 2016, *Astrophysical Journal Letters*, 832, L9, pp. 4

[A88] Comparing Simulations of AGN Feedback
M. L. A. Richardson, **E. Scannapieco**, R. J. Thacker, J. Devriendt, A. Slyz, J. Wurster, Y. Dubois, & J. Silk 2016, *Astrophysical Journal*, 825, 83, pp. 26

[A87] The Launching of Cold Clouds by Galaxy Outflows II: Hydrodynamic Interactions with Conduction
M. Brüggen, & **E. Scannapieco** 2016*, Astrophysical Journal*, 822, 31, pp. 17

[A86] Constraining AGN Feedback in Massive Ellipticals with South Pole Telescope Measurements of the Thermal Sunyaev-Zel'dovich Effect
A. Spacek, **E. Scannapieco,** S. Cohen, B. Joshi, & P. Mauskopf 2016, *Astrophysical Journal*, 819, 128, pp. 22

[A85] Atomic Chemistry in Turbulent Media II: Effect of the Redshift Zero Metagalactic Background
W. J. Gray & **E. Scannapieco** 2016, *Astrophysical Journal*, 2016, 818, 198, pp. 26

[A84] Galaxy Outflows Without Supernovae
S. Sur, **E. Scannapieco,** & E. Ostriker 2016, *Astrophysical Journal*, 818, 28, pp. 17

[A83] Observing and Analyzing Images From a Simulated High-Redshift Universe
R. J. Morgan, R. Windhorst, **E. Scannapieco,** R. J. Thacker, 2015, *Publications of the Astronomical Society of the Pacific,* 127, 803, pp. 22

[A82] The Launching of Cold Clouds by Galaxy Outflows I: Hydrodynamic Interactions with

Radiative Cooling
E. Scannapieco, & M. Brüggen, 2015, *Astrophysical Journal*, 805, 158, pp. 19

[A81] Atomic Chemistry in Turbulent Media I: Effect of Atomic Cooling
W. J. Gray, **E. Scannapieco**, & D. Kasen, 2015, *Astrophysical Journal*, 801, 107, pp. 16

[A80] Alignment of the Scalar Gradient in Evolving Magnetic Fields
S. Sur, L. Pan, *&* **E. Scannapieco,** 2014, *Astrophysical Journal Letters*, 790, 9, pp. 5

[A79] Astrobiological Stoichiometry
P A. Young, et al. (including **E. Scannapieco)** 2014, Astrobiology, 14, 603-626

[A78] High-Velocity-Dispersion Cold Gas in ULIRG Outflows. I: Direct Simulations
D. J. Williamson, R. J. Thacker, **E. Scannapieco,** & M. Brüggen 2014, *Monthly Notices of the Royal Astronomical Society,* 441, 389-403

[A77] Mixing in Magnetized Turbulent Media
S. Sur, L. Pan, *&* **E. Scannapieco,** 2014, *Astrophysical Journal*, 784, 94, pp. 13

[A76] Formation of Compact Clusters from High Resolution Hybrid Cosmological Simulations
M. L. A. Richardson, **E. Scannapieco**, & W. J. Gray 2013, *Astrophysical Journal*, 778, 80, pp. 22

[A75] Modeling the Pollution of Pristine Gas in the Early Universe
L. Pan, **E. Scannapieco**, & J. Scalo 2013*, Astrophysical Journal*, 775, 111, pp. 34

[A74] Hybrid Cosmological Simulations with Stream Velocities
M. L. A. Richardson, **E. Scannapieco**, & R. J. Thacker 2013, *Astrophysical Journal*, 771, 81, pp. 13

[A73] Thermal and Chemical Evolution of Collapsing Filaments
W. J. Gray, & **E. Scannapieco** 2013, *Astrophysical Journal,* 768, 174, pp. 16

[A72] Understanding Galaxy Outflows as the Product of Unstable Turbulent Support
E. Scannapieco 2013, *Astrophysical Journal Letters,* 763, 51, pp. 5

[A71] Mixing of Clumpy Supernova Ejecta into Molecular Clouds
L. Pan, S. J. Desch, **E. Scannapieco**, & F.X. Timmes, F.~X. 2012, *Astrophysical Journal,* 756, 102, pp. 21

[A70] Near-Infrared Imaging of a z=6.42 Quasar Host Galaxy With the Hubble Space Telescope Wide Field Camera 3
M. Mechtley, R. A. Windhorst, R. E. Ryan, G. Schneider, S. Cohen, R. A. Jansen, X. Fan, N. Hathi, W. C. Keel, A. Koekemoer, H. R Rottgering, **E. Scannapieco,** D. P. Schneider, M. A. Strauss, H. J. Yan 2012, *Astrophysical Journal Letters,* 756, 38, pp. 6

[A69] The Pollution of Pristine Material in Compressible Turbulence
L. Pan, **E. Scannapieco**, & J. Scalo 2012*, Journal of Fluid Mechanics*, 700, 459-489

[A68] Remnants of Binary White Dwarf Mergers

C. Raskin, **E. Scannapieco**, G. Rockefeller, C. Fryer, S. Diehl, & F.X. Timmes, 2012, *Astrophysical Journal, 746, 62,* pp. 15

[A67] Identification of a Fundamental Transition in a Turbulently-Supported Interstellar Medium
E. Scannapieco, W. Gray, & *L. Pan* 2011, *Astrophysical Journal, 746, 57,* pp. 9

[A66] Formation of Compact Stellar Clusters by High-Redshift Galaxy Outflows III: Observability and Connection to Halo Globular Clusters
W. J. Gray, & **E. Scannapieco** 2011, *Astrophysical Journal,* 742, 100, pp. 18

[A65] Predicting the Merger Fraction of Lyman alpha Emitters from Redshift z~3 to z~7
V. Tilvi, **E. Scannapieco**, S. Malhotra, & J. Rhoads 2011, *Monthly Notices of the Royal Astronomical Society*, 418, 2196-2201

[A64] The Temperature of Hot Gas in Galaxies and Clusters: Baryons Dancing to the Tune of Dark Matter
S. H. Hansen, A. V. Maccio, E. Romano-Diaz, Y. Hoffman, M. Brüggen, **E. Scannapieco**, & G. S. Stinson 2011, *Astrophysical Journal,* 734, 62, pp. 7

[A63] Formation of Compact Stellar Clusters by High-Redshift Galaxy Outflows II: Effect of Turbulence and Metal-line Cooling
W. J. Gray, & **E. Scannapieco** 2011, *Astrophysical Journal,* 733, 88-100

[A62] Passive Scalar Structures in Supersonic Turbulence
L. Pan, & **E. Scannapieco** 2011, *Physical Review E,* 83, 04302(R), pp. 4

[A61] ^{56}Ni Production in Double Degenerate White Dwarf Collisions
C. Raskin**, E. Scannapieco**, G. Rockefeller, C. Fryer, S. Diehl, & F.X. Timmes, 2010, *Astrophysical Journal,* 724, 111-125

[A60] Mixing in Supersonic Turbulence
L. Pan, & **E. Scannapieco** 2010, *Astrophysical Journal,* 721, 1765-1782

[A59] The Size and Origin of Metal-Enriched Regions in the Intergalactic Medium from Spectra of Binary Quasars
C. L. Martin, **E. Scannapieco**, S. L. Ellison, J. F. Hennawi, S. G. Djorgovski, & A. Fournier 2010, *Astrophysical Journal*, 721, 174-192

[A58] Simulating Supersonic Turbulence in Galaxy Outflows
E. Scannapieco, & M. Brüggen 2010, *Monthly Notices of the Royal Astronomical Society,* 405, 1634-1653

[A57] Formation of Compact Stellar Clusters by High-Redshift Galaxy Outflows I: Nonequillibrium Coolant Formation
W. J. Gray, & **E. Scannapieco** 2010, *Astrophysical Journal,* 718, 417-432

[A56] Thermonuclear .Ia Supernovae from Helium Shell Detonations: Explosion Models and Observables
K. J. Shen, D. Kasen, N. Weinberg, L. Bildsten, & **E. Scannapieco** 2010, *Astrophysical Journal,* 715, 767-775

[A55] Mining the Galactic Halo for Very Metal-Poor Stars
S. Salvadori, A. Ferrara, R. Schneider, **E. Scannapieco**, & D. Kawata 2010, *Monthly Notices of the Royal Astronomical Society*, 401, L5-L9

[A54] Spectra and Light Curves of Failed Supernovae
C. L. Fryer, P. J. Brown, F. Bufano, J. A. Dahl, C. J. Fontes, L. H. Frey, S. T. Holland, A. L. Hungerford, S. Immler, P. Mazzali, P. A. Milne, **E. Scannapieco**, N. Weinberg, & P. A. Young, 2009, *Astrophysical Journal,* 707, 193-207

[A53] Prompt Ia Supernovae are Significantly Delayed
C. Raskin, **E. Scannapieco**, J. Rhoads, M. Della Valle 2009, *Astrophysical Journal Letters*, 707, 74-78

[A52] On Type Ia Supernova From The Collision of Two White Dwarfs
C. Raskin, F. Timmes, **E. Scannapieco**, S. Diehl, & C. Fryer 2009, *Monthly Notices of the Royal Astronomical Society Letters*, 399, 156-159

[A51] A Physical Model of Lyman Alpha Emitters
V. Tilvi, S. Malhotra , J. Rhoads, **E. Scannapieco**, R. J.Thacker, I. Iliev, & G. Mellema 2009, *Astrophysical Journal*, 704,724-732

[A50] The Contribution of the IGM and Minihalos to the 21 cm Signal of Reionization,
B. Yue, B. Ciardi, **E. Scannapieco**, & X. Chen, 2009, *Monthly Notices of the Royal Astronomical Society,* 398, 2122-2133

[A49] Self-Regulation of AGN in Galaxy Clusters,
M. Brüggen, & **E. Scannapieco** 2009, *Monthly Notices of the Royal Astronomical Society*, 398, 548-560

[A48] Power Spectrum for the Small-scale Universe
L. M. Widrow, P .J. Elahi, R. J. Thacker, M. Richardson, & **E. Scannapieco** 2009, *Monthly Notices of the Royal Astronomical Society*, 397, 1275-1285

[A47] Evolution of X-ray Cavities
M. Brüggen, & **E. Scannapieco** 2009, *Monthly Notices of the Royal Astronomical Society,* 395, 2210-2220

[A46] Subhaloes in Scale-Free Cosmologies
P. J. Elahi, R. J. Thacker, L. M. Widrow, & **E. Scannapieco** 2009, *Monthly Notices of the Royal Astronomical Society*, 395, 1950-1962

[A45] Globular Clusters as Testbeds for Type Ia Supernovae
E. Pfahl, **E. Scannapieco**, & L. Bildsten 2009, *Astrophysical Journal Letters*, 695, 111-114

[A44] Predictions of Quasar Clustering: Redshift, Luminosity and Selection Dependence
R. J. Thacker, **E. Scannapieco**, & H. M. P. Couchman. & M. Richardson 2009, *Astrophysical Journal,* 693, 552-563

[A43] Using Spatial Distributions to Constrain Progenitors of Supernovae and Gamma Ray Bursts

C. Raskin, **E. Scannapieco**, J. Rhoads, & M. Della Valle 2008, *Astrophysical Journal,* 689, 358-370

[A42] Subgrid Modeling of AGN-Driven Turbulence in Galaxy Clusters
E. Scannapieco, & M. Brüggen 2008, *Astrophysical Journal,* 686, 927-947

[A41] Measuring AGN Feedback with the Sunyaev-Zel'dovich Effect
E. Scannapieco, R. J. Thacker, & H. M. P. Couchman, 2008, *Astrophysical Journal*, 678, 674-685

[A40] The Spatial Distribution of the Galactic First Stars II: SPH Approach
C. B. Brook, D. Kawata, **E. Scannapieco**, H. Martel, & B. K. Gibson 2007, *Astrophysical Journal*, 661, 10-18

[A39] The Spatial Distribution of the Galactic First Stars I: High-Resolution N-body Approach
E. Scannapieco, D. Kawata, C. B. Brook, B. K. Gibson, R. Schneider, A. Ferrara, & B. K. Gibson 2006, *Astrophysical Journal*, 653, 285-299

[A38] Quasars: What turns them off?
R. J. Thacker, **E. Scannapieco**, H. M. P. Couchman, 2006, *Astrophysical Journal*, 653, 86-100

[A37] Relativistic Ionization Fronts
P. R. Shapiro, I. T. I liev, M. A. Alvarez, & **E. Scannapieco**, 2006, *Astrophysical Journal*, 648, 922-935

[A36] The Effect of Minihalos on Cosmic Reionization
B. Ciardi, **E. Scannapieco**, F. Stoehr, A. Ferrara, I. T. Iliev, & P. R. Shapiro 2006, *Monthly Notices of the Royal Astronomical Society,* 366, 689-696

[A35] The Sources of Intergalactic Metals
E. Scannapieco, C. Pichon, B. Aracil, P. Petitjean, R. J. Thacker, D. Pogosyan, J. Bergeron, & H. M. P. Couchman 2006, *Monthly Notices of the Royal Astronomical Society*, 365, 615-637

[A34] AGN Feedback Causes Downsizing
E. Scannapieco, J. Silk, R. Bouwens 2005, *Astrophysical Journal Letters*, 635, 13-16

[A33] Where are the Missing Cosmic Metals?
A. Ferrara, **E. Scannapieco**, & J. Bergeron 2005, *Astrophysical Journal Letters*, 634, 37-40

[A32] The Detectability of Pair-Production Supernovae at $z \leq 6$
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