

Arizona State University (ASU)  
 School of Earth and Space Exploration (SESE)  
 PO Box 871404  
 Tempe, AZ, 85287-1404

Phone: (480) 965-4274  
 Mobile: (505) 603-2022  
 E-mail: [ftimmes@asu.edu](mailto:ftimmes@asu.edu)  
 Web: [cococubed.asu.edu](http://cococubed.asu.edu)

## Research Interests

Stars, in general and accented with Modules for Experiments for Stellar Astrophysics.  
 Supernovae, with emphasis on their progenitor evolution, explosion, and nucleosynthesis.  
 Chemical evolution, growth of every isotope at every point in spacetime.  
 Astrobiology, synthesis and delivery of bioessential elements to habitable systems.  
 Gamma-ray astronomy, particularly from radioactive isotopes.  
 Software Instruments, High Performance Computing, and next-generation Internet.

## Education

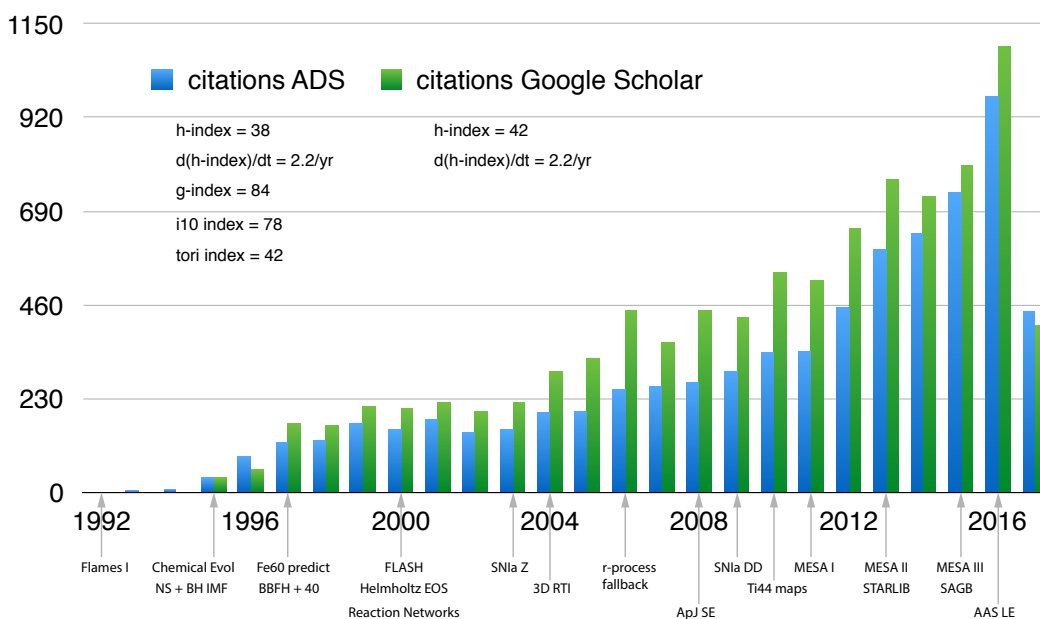
1988 – 1992 UC Santa Cruz M.S. & Ph.D. in Astronomy & Astrophysics  
 1981 – 1984 UC Santa Barbara B.S. in Physics, with Honors

## Recent Appointments

2016 – Lead Editor, American Astronomical Society [Journals](#)  
 2009 – Scientific Editor, American Astronomical Society [Journals](#)  
 2008 – Professor, SESE, ASU  
 2011 – 2015 Director, ASU Advanced Computing Center

## Publication Summary

- 269 publications, 104 refereed + 4 under review + 2 in preparation.
- Citations: [7213 ADS](#), [9562 Google Scholar](#);  $h$ -index: 38 ADS, 42 Google Scholar.
- Papers with 1000+ citations: 2; with 500+ citations: 4; with 200+ citations: 11; with 100+ citations: 19.
- [One](#) of the [25 most cited](#) Astronomy & Astrophysics papers published in 1995.
- [One](#) of the [15 most cited](#) Astronomy & Astrophysics papers published in 2000.
- [Front Cover](#) of Physics Today, February 2002.
- [One](#) of the [15 most cited](#) Astronomy & Astrophysics papers published in 2011.
- [One](#) of the [15 most cited](#) Astronomy & Astrophysics papers published in 2013.
- [One](#) of the [15 high-impact](#) papers highlighted by the American Astronomical Society in 2015.
- [One](#) of the [20 most cited](#) Astronomy & Astrophysics papers published in 2015.



### Recent Research Funding

Total Awards Since 2008: \$26.0M, \$6.8M to ASU

Expenditures: FY16 \$812K, FY15 \$404K, FY14 \$235K, FY13 \$306K

2017 – 2021	NSF	PI	\$2.3M, <i>Modules for Experiments ... (MESA)</i>
2014 – 2019	NSF	Co-PI	\$11.2M, <i>Physics Frontiers Center, JINA-CEE</i>
2015 – 2018	NASA	Co-PI	\$676K, <i>Assessing the Effects of New Reaction Rates ...</i>
2014 – 2017	NSF	PI	\$806, <i>Modules for Experiments ... (MESA)</i>
2014 – 2017	NASA	PI	\$1.2M, <i>Supernova Progenitor ... (SPIDER)</i>
2015 – 2016	Simons	PI	\$118K, <i>Simons Fellowship</i>
2014 – 2016	NSF	PI	\$398K, <i>Campus Cyberinfrastructure ...</i>
2016 – 2016	NSF	PI	\$100K, <i>2016 NSF SI2 PI Workshop</i>

### Recent Leadership and Management Activities

2011 – 2015 \$1.2M/yr, Director, Advanced Computing Center, ASU

2009 – 2011 \$16M/yr, Associate Director of Operations, SESE, ASU

### Recent Awards, Fellowships, and Honors

2015 [Simons Fellow](#) in Theoretical Physics

2014 [Fellow](#), American Physical Society

2013 Student Cluster Competition Prize, [Supercomputing](#)

2008 Certificate of Service, Department of Energy

2004 National Security Fellow, Los Alamos

2000 Gordon Bell Prize, [Supercomputing](#)

### Recent Award Nomination Drives

2017 Lars Bildsten, Dannie Heineman Prize for Astrophysics, American Astronomical Society

2016 Roland Diehl, Fellow, American Physical Society

2012 David Arnett, Henry Norris Russell Lectureship, American Astronomical Society

2009 David Arnett, Hans A. Bethe Prize, American Physical Society

### Selected Invited Lectures, Addresses, and Colloquia

American Physical Society Nuclear Physics Division; Argonne National Laboratory; Arizona State University; Aspen Center for Physics; California Institute of Technology; Duke University; Harvard University; Kavli Institute for Theoretical Physics; Lawrence Berkeley National Laboratory; Lawrence Livermore National Laboratory; Los Alamos National Laboratory; Michigan State University; North Carolina State; Northwestern University; Notre Dame University; Physical Society of Japan Nuclear Physics Division; Princeton University; SUNY - Stony Brook; Steward Observatory; Texas A&M Commerce; University of Arizona; UC Berkeley; UC Santa Barbara; UC San Diego; University of Chicago; University of Maryland; UNC at Chapel Hill; University of Pittsburgh; Washington State University; Yale University

### Recent National and International Service

- 2016 – Lead Editor, American Astronomical Society [Journals](#)
- 2009 – Scientific Editor, American Astronomical Society [Journals](#)
- 2006 – Executive Committee, [Joint Institute for Nuclear Astrophysics](#)
- 2004 – Review ~40 proposals/year for NSF, NASA, DOE & Private Foundations
- 2015 – 2016 Chair, [2016 NSF SI2 PI Workshop](#)
- 2014 – 2015 Chair, [2015 NSF SI2 PI Workshop](#)
- 2014 – 2014 Organizer, Type Ia Supernovae: progenitors, explosions, and cosmology, UChicago
- 2013 – 2014 Organizer, Supernova Type Ia Workshop, Institute for Advanced Study, Princeton

### Recent University and Department Service

- 2016 – University Senator, ASU
- 2014 – 2015 University Senate, Research Computing Task Force, ASU
- 2013 – 2015 University Senate, Data Task Force, ASU
- 2012 – 2015 Information Technology Leadership Council, ASU
- 2011 – 2015 Director, ASU Advanced Computing Center
- 2008 – 2015 Academic Advisor, SESE
- 2013 – 2014 Vice Provost, Education Technology, ASU
- 2013 – 2014 Provost’s STEM Exploratory Committee, ASU
- 2012 – 2013 Provost’s Committee on Excellence in Digital Teaching and Learning, ASU

### Recent Education and Public Outreach Activities

- 2015 – Largest [college-credit](#) eligible astronomy course in the world, ~30,000 students/yr
- 2011 – Director & Lecturer, [MESA Summer School](#), UC Santa Barbara
- 2004 – [cococubed.asu.edu](#), ~20,000 hits/yr
- 1998 – Deliver ~2 talks/year to K-12, Science Centers, Museums, Astronomy Clubs
- August 2015 First [college-credit](#) eligible MOOC in the world
- 2010 – 2014 Largest online SQ Credit lecture course at ASU, ~900 students/offering
- 2010 – 2014 Largest online SQ Credit laboratory course at ASU, ~900 students/offering

### Summary of Undergraduate and Graduate Teaching

Introduction to Solar Systems (26); Astronomy Laboratory (26); Introductory Astronomy (16); Energy in Everyday Life (6); Calculus (4); Geometry in Art & Nature (4); Life in the Universe (2); Numerical Techniques in Earth and Space Sciences (1).

### Graduate and Postdoctoral Sponsors:

Stan Woosley, Graduate Thesis Advisor, UC Santa Cruz  
Jim Truran, Postdoc Advisor, University of Chicago  
Don Clayton, Postdoc Advisor, Clemson University  
Richard Lingenfelter, Postdoc Advisor, UC San Diego

**Recent Undergraduate Advisor to:**

Carl E. Fields	Physics 2016 ASU	Michigan State University
Sandra Schmidt	Physics 2011 ASU	Intel Corporation
Amed Barakat	Physics 2011 ASU	Masters program at ASU

**Recent Undergraduate Awards:**

Carl E. Fields	2016	NSF Graduate Research Fellowship Ford Foundation Predoctoral Fellowship
	2015	AAS Beth Brown Memorial Prize, National Society of Black Physicists Carl A. Rouse Fellowship, Caltech NASA Space Grant Undergraduate Fellowship, ASU Norm Perrill Origins Project Scholarship, ASU CLAS Undergraduate Summer Enrichment Award, ASU
	2014	Gold Medal, Sigma Xi Student Research Conference Award CLAS Undergraduate Summer Enrichment Award, ASU Asian & Pacific Islander American / Wells Fargo Scholarship, ASU
Milissa Smith	2011	First-Generation Scholarship, ASU

**Recent Graduate Advisor to:**

Wendy Hawley	2012	ASU	Research Associate, UC Boulder
Natalie Hinkel	2012	ASU	Postdoctoral Scholar, Vanderbilt
Cody Raskin	2011	ASU	Staff at LLNL
Georgios Magkotsios	2011	Notre Dame	Finance, USC

**Recent Graduate Student Awards:**

Cody Raskin	2010	NASA Earth and Space Science Fellowship
	2010	Annual Meeting of Nobel Laureates, NSF Invitee

**Recent Postdoctoral Advisor to:**

Ilka Petterman	2015-2018	ASU
Rob Farmer	2014-2017	ASU
Soma De	2010-2014	Basis Schools, Scottsdale
Grant Newsham	2011-2013	Retired
Themis Athanassiadou	2009-2012	European Grid Infrastructure

**Recent Postdoctoral Awards:**

Soma De	2010-2013	SESE Postdoctoral Fellow
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## Refereed Publications

110. Can The James Webb Space Telescope Observe Individual Population Iii Stars Or Their Black Hole Accretion Disks Directly Through Cluster Caustic Transits? Rogier A. Windhorst, J. Stuart B. Wyithe, F.X. Timmes, Daniel Coe, Mark Dijkstra & Simon P. Driver *Astrophysical Journal*, In Preparation
109. Resolution studies for massive stars using MESA, I. Petermann, F.X. Timmes, C.E. Fields, R. Farmer, *Astrophysical Journal*, In Preparation
108. Constraining The Single-degenerate Channel Of Type Ia Supernovae: The Production Of Stable Iron-peak Elements In SNR 3C 397, Pranav Dave, Rahul Kashyap, Robert Fisher, F.X. Timmes, Dean Townsley, *Astrophysical Journal*, Submitted
107. Measurement of Type Ia Supernova Metallicities from their Remnants, Héctor Martínez-Rodríguez, Carles Badenes, Hiroya Yamaguchi, Eduardo Bravo, Anthony L. Piro, Hideyuki Mori, Brett Andrews, and F.X. Timmes *Astrophysical Journal*, Submitted
106. The  $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$  reaction and its implications for stellar helium burning, R. J. deBoer, J. Gorres, M. Wiescher, R.E. Azuma, A. Best, C.R. Brune, C.E. Fields, S. Jones, M. Pignatari, D. Sayre, K. Smith, F.X. Timmes, & E. Uberseder, *Review of Modern Physics*, Submitted
105. The Neutron Capture Process in the He Shell in Core-Collapse Supernovae. Presolar Silicon Carbide Grains: a diagnostic for nuclear astrophysics, Marco Pignatari, Peter Hoppe, Reto Trappitsch, Chris Fryer, F.X. Timmes, Falk Herwig, and Raphael Hirschi, *Geochimica and Cosmochimica Acta*, Submitted
104. [On Variations Of Pre-Supernova Model Properties](#), R. Farmer, C.E. Fields, I. Petermann, Luc Dessart, M. Cantiello, B. Paxton, & F.X. Timmes, *Astrophysical Journal Supplement*, 227, 22, 2016
103. [Turbulent Chemical Diffusion In Convectively Bounded Carbon Flames](#), Daniel Lecoanet, Josiah Schwab, Eliot Quataert, Lars Bildsten, F.X. Timmes, Keaton J. Burns, Geoffrey M. Vasil, Jeffrey S. Oishi, & Benjamin P. Brown, *Astrophysical Journal*, 832, 71, 2016
102. [Bayesian Estimation Of Thermonuclear Reaction Rates](#), C. Iliadis, K.A. Anderson, A. Coc, S. Starrfield, & F.X. Timmes, *Astrophysical Journal*, 831, 107, 2016
101. [NuGrid stellar data set. I. Stellar yields from H to Bi for stars with metallicities  \$Z=0.02\$  and  \$Z=0.01\$](#) , Pignatari, M., Herwig, F., Hirschi, R., Bennett, M., Rockefeller, G., Fryer, C., Timmes, F. X., Ritter, C., Heger, A., Jones, S., Battino, U., Ritter, C., Dotter, A., Trappitsch, R., Diehl, S., Frischknecht, U., Hungerford, A., Magkotsios, G., Travaglio, C. Young, P., *Astrophysical Journal*, 225, 24, 2016
100. [Nucleosynthetic Yields From Multidimensional Simulations of Type Ia Supernova: Reconstruction of Thickened Flames and Verification for Planar Detonations](#), D.M. Townsley, B.J. Miles, F.X. Timmes, A.C. Calder, and E.F. Brown, *Astrophysical Journal Supplement*, 225, 3, 2016

99. [On Measuring the Metallicity of Supernovae Type Ia Progenitors](#), B.J. Miles, D.R. van Rossum, D.M. Townsley, F.X. Timmes, A.P. Jackson, A.C. Calder, and E.F. Brown, *Astrophysical Journal*, 824, 59, 2016
98. [Properties of Carbon-Oxygen White Dwarfs From Monte Carlo Stellar Models](#) C.E. Fields, R. Farmer, I. Petermann, C. Iliadis, and F.X. Timmes, *Astrophysical Journal*, 823, 46, 2016
97. [Convective Properties of Rotating Two-Dimensional Core-Collapse Supernova Progenitors](#) E. Chatzopoulos, S.M. Couch, W.D. Arnett, and F.X. Timmes, *Astrophysical Journal*, 822, 61, 2016
96. [Erratum: Modules for Experiments in Stellar Astrophysics \(MESA\): Binaries, Pulsations, and Explosions](#), B. Paxton, P. Marchant, J. Schwab, E.B. Bauer, L. Bildsten, M. Cantiello, L. Dessart, R. Farmer, H. Hu, N. Langer, R.H.D. Townsend, D.M. Townsley, and F.X. Timmes, *Astrophysical Journal Supplement*, 223, 18, 2016
95. [Modules for Experiments in Stellar Astrophysics \(MESA\): Binaries, Pulsations, and Explosions](#), B. Paxton, P. Marchant, J. Schwab, E.B. Bauer, L. Bildsten, M. Cantiello, L. Dessart, R. Farmer, H. Hu, N. Langer, R.H.D. Townsend, D.M. Townsley, and F.X. Timmes, *Astrophysical Journal Supplement*, 220, 1, 2015
94. [Carbon-rich presolar grains from massive stars: Subsolar  \$^{12}\text{C}/^{13}\text{C}\$  and  \$^{14}\text{N}/^{15}\text{N}\$  ratios and the missing  \$^{15}\text{N}\$](#) , M. Pignatati, E. Zinner, P. Hoppe, C. Jordan, B.K. Gibson, R. Trappitsch, F. Herwig, C.L. Fryer, R. Hirschi, and F.X. Timmes, *Astrophysical Journal Letters*, 808, 2, 2015
93. [The Three Dimensional Evolution to Core Collapse of a Massive Star](#), S.M. Couch, E. Chatzopoulos, W.D. Arnett, and F.X. Timmes, *Astrophysical Journal Letters*, 808, 1, 2015
92. [On Carbon Burning in Super Asymptotic Giant Branch Stars](#), R. Farmer, C.E. Fields, and F.X. Timmes, *Astrophysical Journal*, 807, 184, 2015
91. [Constraints On Explosive Silicon Burning In Core-Collapse Supernovae From Measured Ni/Fe Ratios](#), A. Jerkstrand, F.X. Timmes, G. Magkotsios, S.A. Sim, C. Fransson, J. Spyromilio, J. Sollerman, A. Heger, B. Müller, J. Sollerman, and S.J. Smartt, *Astrophysical Journal*, 807, 110, 2015
90. [Statistical Methods for Thermonuclear Reaction Rates and Nucleosynthesis Simulations](#), C. Iliadis, R. Longland, A. Coc, F.X. Timmes and A.E Champagne, *Journal of Physics G: Nuclear and Particle Physics*, 42 034007, 2015
89. [Stellar Abundances in the Solar Neighborhood: The Hypatia Catalog](#), N.R. Hinkel, F.X. Timmes, P.A. Young, M.D. Pagano, M.C. Turnbull, *The Astronomical Journal*, 148, 54, 2014
88. [The Light Curve Of SN 1987A Revisited: Constraining Production Masses Of Radioactive Nuclides](#), I. Seitenzahl, F.X. Timmes, and G. Magkotsios, *Astrophysical Journal*, 792, 10, 2014
87. [On Silicon Group Elements Ejected by Supernovae Type Ia](#), S. De, F.X. Timmes, E.F. Brown, A.C. Calder, D.M. Townsley, T. Athanassiadou, D.A. Chamulak, W.P. Hawley, and D. Jack, *Astrophysical Journal*, 787, 149, 2014

86. [Evolution of FLASH, a multi-physics scientific simulation code for high-performance computing](#), A. Dubey and 19 co-authors including F.X. Timmes, *International Journal of High Performance Computing Applications*, 28, 2, 225, 2014
85. [Modules for Experiments in Stellar Astrophysics \(MESA\): Planets, Oscillations, Rotation, and Massive Stars](#), B. Paxton, M. Cantiello, P. Arras, L. Bildsten, E.F. Brown, A. Dotter, C. Mankovich, M.H. Montgomery, D. Stello, F.X. Timmes, and R. Townsend, *Astrophysical Journal Supplement*, 208, 4, 2013
84. [Advanced burning stages and fate of 8-10  \$M\_{\odot}\$  stars](#), S. Jones, R. Hirschi, K. Nomoto, F.X. Timmes, T. Fischer, F. Herwig, and B. Paxton, *Astrophysical Journal*, 772, 150, 2013
83. [STARLIB: A Next-Generation Reaction-Rate Library for Nuclear Astrophysics](#), A.L. Sallaska, C. Iliadis, A.E. Champagne, S. Goriely, S. Starrfield, and F. X. Timmes, *Astrophysical Journal Supplement*, 207, 18, 2013
82. [Silicon carbide grains of type C provide evidence for the production of the unstable isotope  \$^{32}\text{Si}\$  in supernovae](#), M. Pignatari, E. Zinner, M. G. Bertolli, R. Trappitsch, P. Hoppe, T. Rauscher, C. Fryer, F. Herwig, R. Hirschi, F. X. Timmes, and F.-K. Thielemann, *Astrophysical Journal Letters*, 771, L7, 2013
81. [Production of carbon-rich presolar grains from massive stars](#), M. Pignatari, M. Wiescher, F.X. Timmes, R.J. de Boer, F.-K. Thielemann, C. Fryer, A. Heger, F. Herwig, and R. Hirschi, *Astrophysical Journal Letters*, 767 L22, 2013
80. [The  \$^{12}\text{C} + ^{12}\text{C}\$  reaction and the impact on nucleosynthesis in massive stars](#), M. Pignatari, R. Hirschi, M. Wiescher, R. Gallino, M. Bennett, M. Beard, C. Fryer, F. Herwig, G. Rockefeller, and F.X. Timmes, *Astrophysical Journal*, 762, 31, 2013
79. [On Simulating Type Ia Supernovae](#), A.C. Calder, B.K. Krueger, A.P. Jackson, D.M. Townsley, E.F. Brown and F.X. Timmes, *Journal of Physics*, 402, 012023, 2012
78. [Zero Impact Parameter White Dwarf Collisions in FLASH](#), W.P. Hawley, T. Athanassiadou, and F.X. Timmes, *Astrophysical Journal*, 759, 39, 2012
77. [Evaluating Systematic Dependencies of Type Ia Supernovae: The Influence of Central Density](#), B.K. Krueger, A.P. Jackson, A.C. Calder, D.M. Townsley, E.F. Brown, and F.X. Timmes, *Astrophysical Journal*, 757, 175, 2012
76. [Mixing of Clumpy Supernova Ejecta into Molecular Clouds](#), L. Pan, S. Desch, E. Scannapieco, and F.X. Timmes, *Astrophysical Journal*, 756, 102, 2012
75. [The effect of  \$^{12}\text{C} + ^{12}\text{C}\$  rate uncertainties on the evolution and nucleosynthesis of massive stars](#), M. E. Bennett, R. Hirschi, M. Pignatari, S. Diehl, C. Fryer, F. Herwig, A. Hungerford, K. Nomoto, G. Rockefeller, F.X. Timmes, and M. Wiescher, *Monthly Notices of the Royal Astronomical Society*, 420, 3047, 2012
74. [Remnants of Binary White Dwarf Mergers](#), C. Raskin, E. Scannapieco, G. Rockefeller, C.L. Fryer, and F.X. Timmes, *Astrophysical Journal*, 746, 62, 2012

73. [Freeze-out Yields of Radioactivities in Core-collapse Supernovae](#) G. Magkotsios, F.X. Timmes, and M. Wiescher, *Astrophysical Journal*, 741 78, 2011
72. [Modules for Experiments in Stellar Astrophysics \(MESA\)](#), B. Paxton, L. Bildsten, A. Dotter, F. Herwig, P. Lesaffre, and F.X. Timmes, *Astrophysical Journal Supplement*, 192 3, 2011
71. [<sup>44</sup>Ti and <sup>56</sup>Ni from Core-Collapse Supernovae](#), G. Magkotsios, F.X. Timmes, A. Hungerford, C.L. Fryer, P. Young, and M. Wiescher, *Astrophysical Journal Supplement*, 191 66, 2010
70. [<sup>56</sup>Ni Production in Double-degenerate White Dwarf Collisions](#), C. Raskin, E. Scannapieco, G. Rockefeller, C.L. Fryer, S. Diehl and F.X. Timmes, *Astrophysical Journal*, 724 111, 2010
69. [Evaluating Systematic Dependencies of Type Ia Supernovae: The Influence of Deflagration to Detonation Density](#), A.P. Jackson, A.C. Calder, D.M. Townsley, D.A. Chamulak, E.F. Brown, and F.X. Timmes, *Astrophysical Journal*, 720 99, 2010
68. [On Variations of the Brightness of Type Ia Supernovae with the Age of the Host Stellar Population](#), B.K. Krueger, A.P. Jackson, D.M. Townsley, A.C. Calder, E.F. Brown, and F.X. Timmes, *Astrophysical Journal*, 719 L5, 2010
67. [Spectra of Type Ia Supernovae from Double Degenerate Mergers](#), C.L. Fryer and 16 others including F.X. Timmes, *Astrophysical Journal*, 725 296, 2010
66. [The effect of <sup>12</sup>C + <sup>12</sup>C rate uncertainties on s-process yields](#), M.E. Bennet and 11 others including F.X. Timmes, *Journal of Physics*, 202, 012023, 2010
65. [On Type Ia Supernovae From The Collisions of Two White Dwarfs](#), C. Raskin, F.X. Timmes, E. Scannapieco, S. Diehl, and C. Fryer, *Monthly Notices of the Royal Astronomical Society*, 399L, 156, 2009
64. [Evaluating Systematic Dependencies of Type Ia Supernovae: The Influence of Progenitor <sup>22</sup>Ne Content on Dynamics](#), D.M. Townsley, A.P. Jackson, A.C. Calder, D.A. Chamulak, E.F. Brown, and F.X. Timmes, *Astrophysical Journal*, 701, 1582, 2009
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60. [The Laminar Flame Speedup by Neon-22 Enrichment in White Dwarf Supernovae](#), D. Chamulak, E.F. Brown, and F.X. Timmes, *Astrophysical Journal*, 655, L93, 2007
59. [r-Process from Supernova Fallback](#) Christopher L. Fryer, Aimee Hungerford, Falk Herwig, and F.X. Timmes, *Astrophysical Journal*, 626, L141, 2006



58. [Hydrodynamic simulations of He-shell flash convection](#), F. Herwig, B. Freytag, R. M. Hueckstaedt and F.X. Timmes, *Astrophysical Journal*, 642, 1057, 2006
57. [Local Ignition in Carbon/Oxygen White Dwarfs – I: One-zone Ignition and Spherical Shock Ignition of Detonations](#), L. Jonathan Dursi and F.X. Timmes *Astrophysical Journal*, 641, 1071, 2006
56. [Constraints on the Progenitor of Cassiopeia A](#), P.A. Young, C.L. Fryer, A. Hungerford, D. Arnett, G. Rockefeller, F.X. Timmes, B. Voit, C.Meakin, K.Erickson, *Astrophysical Journal*, 640, 891, 2006
55. [Changing the r-Process Paradigm](#), C.L. Fryer, A. Hungerford, F.X. Timmes *Nuclear Physics A*, 758, 599, 2005
54. [Studies of Accretion onto Hot, Massive White Dwarfs: The Growth to the Chandrasekhar Limit?](#), S. Starrfield, W.R. Hix, F.X. Timmes, E.M. Sion, W.M. Sparks, S.J. Dwyer, *Nuclear Physics A*, 758, 455, 2005
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51. [On the Nonlinear Evolution of Wind-driven Gravity Waves](#), A. Alexakis, A.C. Calder, L.J. Dursi, R. Rosner, J.W. Truran, B. Fryxell, M. Zingale, F.X. Timmes, K. Olson, P.M. Ricker, *Physics of Fluids*, 16, 9, 3256, 2004
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47. [Validating astrophysical simulation codes](#), A.C. Calder, L.J. Dursi, B. Fryxell, T. Plewa, V.G. Weirs, T. Dupont, H. F. Robey, J.O. Kane, R.P. Drake, B. A. Remington, G. Dimonte, J. Hayes, J. M. Stone, P. M. Ricker, F.X. Timmes, M. Zingale, & K. Olson, *Computing in Science and Engineering*, 10, 6, 2004

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