

## CURRICULUM VITAE

### DALE ANDREW FRAIL

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**Education:** 1989 – Ph.D. in Astronomy, University of Toronto  
1985 – M.Sc. in Astronomy, University of Toronto

**Current Position:** NRAO Astronomer (tenured)

**Research Interests:**

- the origin of gamma ray bursts and soft gamma ray repeaters
- time-domain astronomy with an emphasis on the dynamic radio sky
- pulsars, supernova remnant associations and pulsar wind nebulae
- the 1720 MHz OH maser line toward supernova remnants
- HI absorption and interstellar scattering

**Professional Experience:**

1999-Present: Astronomer, NRAO  
2016 Visiting Associate in Astronomy, Caltech  
2011-2015: Assistant Director, New Mexico Operations, VLA and VLBA  
2011: Visiting Scientist, Harvard Smithsonian Center for Astrophysics (CfA)  
2010: Visiting Scientist, Weizmann Institute of Science  
2006-2009: Assistant Director, Science and Academic Affairs, NRAO  
2001-2002: Visiting Associate in Astronomy, Caltech  
1995-1999: Associate Astronomer, NRAO  
1993-1995: Assistant Astronomer, NRAO  
1990–1993: Jansky Fellow, NRAO  
1989-1991: NSERC Postdoctoral Fellow

**Professional and NRAO Service (since 2008):**

2016 Chandra User’s Committee (CUC)  
NRAO Astronomer Promotion Review Committee (APRC)  
Promotion Cases (Michigan, GSFC, Weizmann, NRL, & TTU)  
Referee for MNRAS, European Research Council and Research Corp.  
Committee on the Future of OVRO  
Community Science Advisory Committee for ZTF (ended Sept 2016)

2015 Chair of Fermi User Committee (term ended August 2015)  
Jansky Lectureship Nomination Committee  
Community Science Advisory Committee (CSAC) for ZTF  
Promotion Cases (UCSD and NCRA-TIFR)  
NuStar Cycle 1 Review, Panel Chair  
Committee on the Future of OVRO

- 2014 Chair of Fermi User Committee  
 Jansky Lectureship Nomination Committee  
 Community Science Advisory Committee (CSAC) for Zwicky  
 Transient Factory  
 Promotion Cases, Caltech  
 Swift Cycle 10 Review, Chair Panel 4  
 Presenter, NASA Astrophysics Senior Review  
 Fermi Cycle 7 Review, Chair Panel 4
- 2013 Chair of the Fermi User Committee  
 Jansky Lectureship Committee  
 Tenure Review case, University of Colorado  
 External thesis reviewer, Curtin University  
 Examiner, Thesis Candidacy Caltech  
 Promotion case, Cambridge University  
 Promotion case, TATA Institute  
 External thesis reviewer, University of Adelaide  
 External promotion, NCRA
- 2012 Fermi Cycle 5 Review, Panel 6, Chair  
 Promotions Review for Harvard  
 NCR Review of scientific staff  
 LDRD Panel for LANL  
 Co-investigator on SWIFT (NASA Midex mission)  
 Fermi User Community  
 Referee for GMRT  
 Referee for ApJ, MNRAS
- 2011 External Examiner, Caltech, PhD Thesis. Mansi Kasliwal  
 Promotions Review for Harvard  
 Tenure Review for the University Colorado Boulder  
 Co-investigator on SWIFT (NASA Midex mission)  
 Tenure Review for the Pennsylvania State College  
 Fermi User Community  
 Referee for GMRT  
 Referee for Nature, MNRAS
- 2010 Tenure Review for the University of California Berkeley  
 Tenure Review for the University Nevada Las Vegas  
 NSERC grant Review (Canada)  
 High Energy Astrophysics Executive Committee of AAS  
 Referee for Advances in Space Research  
 Member, NRAO Observatory Science Council  
 Member, NRAO Observatory Science Operations Working Group
- 2009 Assistant Director, Science and Academic Affairs (SAA)  
 Cycle 17 HST Proposal Review  
 High Energy Astrophysics Executive Committee of AAS  
 Referee for GMRT and LLNL  
 Space Interferometry Mission Advisory Panel  
 Grants Review for Italian Space Agency (ASI)

Chair, NRAO Observatory Science Council  
NRAO Diversity Committee  
NRAO Distinguished Service Committee

2008 Assistant Director, Science and Academic Affairs (SAA)  
Chair, NRAO Observatory Science Council  
Tenure Review for the University of Colorado  
NRAO Diversity Committee  
NRAO Distinguished Service Committee  
High Energy Astrophysics Executive Committee of AAS  
Referee for JCMT for Israel Science Foundation  
Grants Review for Italian Space Agency (ASI)

### **Societies and Organizations:**

High Energy Astrophysics Division of AAS (HEAD)  
International Astronomical Union (IAU)  
American Astronomical Society (AAS)

### **Science Organizing Committees (since 2008):**

Jul	2016	SOC “Boutiques and Experiments”, Pasadena, CA.
Nov	2015	SOC for Sixth Fermi Gamma-Ray Symposium, Washington, DC.
Oct	2013	SOC for Fourth International Gamma-Ray Symposium, Monterey
Apr	2013	SOC for Modern Radio Universe, Germany
Jun	2012	SOC of Gamma Ray Bursts in the Era of Rapid Follow-up, Liverpool
May	2013	SOC for Multi-Messenger Time-Domain Astronomy, Maryland
Jan	2012	Event Horizon Telescope Meeting, Tucson
May	2011	Fermi Symposium, Rome, Italy
Mar	2011	Co-organizer of “Building on New Words, New Horizons”, Santa Fe
Jan	2011	Co-organizer of AAS HEAD Special Session
Mar	2010	Co-organizer High Energy Astrophysics Division Meeting, Hawaii
Apr	2009	Co-organizer NRAO Postdoctoral Symposium, Socorro
Apr	2008	NRAO Scientific Staff Retreat. Futures Planning, Socorro
Mar	2008	High Energy Astrophysics Meeting, Los Angeles

### **Students Supervised:**

2016	Devan Bhakta (Texas Tech. U)
2013	Kunal Mooley (Caltech, PhD)
2012	Corey Bathurst (U. Florida)
2008	Ben Breslauer (Oberlin College)
2004	P. Brian Cameron (Caltech; PhD)
2003	Alicia Soderberg (Caltech; PhD)
2002	Brian Metzger (Iowa)
2000	Kathryn Becker (Oberlin)
2000	Edo Berger (Caltech; PhD)
1999	Chad Young (Mississippi)
1999	Crystal Brogan (Kentucky; PhD)
1998	Josh Bloom (Caltech; PhD)

- 1998 Katrina Koski (NMIMT)
- 1997 Barron Koralesky (Minnesota; PhD)
- 1996 Craig Heinke (Carleton)
- 1995 Chris Carpenter (Harvard)
- 1994 Britt Scharringhausen (Iowa)
- 1993 Tas Philp (North Carolina; PhD)
- 1992 David Moffett (NMIMT; PhD)
- 1990 Henry (“Chip”) Kobulnicky (Iowa)

### Honours and Awards:

- 2016 Doctor of Science, honours causa, Acadia University
- 2010 John Simon Guggenheim Fellowship
- 2009 Maria & Eric Muhlmann Award, Astron. Society of the Pacific, Swift Team
- 2007 Bruno Rossi Prize, American Astronomical Society, with the Swift Team

### Publications:

- 255. Palliyaguru, N. T., Corsi, A., Kasliwal, M. M., Cenko, S. B., Frail, D. A., Perley, D. A., Mishra, N., Singer, L. P., Gal-Yam, A., Nugent, P. E., Surace, J. A.  
*Radio Follow-up of Gravitational-wave Triggers during Advanced LIGO O1*  
2016, *ApJ*, 829, L28
- 254. Frail, D. A., Jagannathan, P., Mooley, K. P. and Intema, H. T.  
*Known Pulsars Identified in the GMRT 150 MHz All-sky Survey*  
2016, *ApJ*, 829, 119
- 253. Frail, D. A., Mooley, K. P., Jagannathan, P. and Intema, H. T.  
*Pulsar candidates towards Fermi unassociated sources*  
2016, *MNRAS*, 461, 1062
- 252. Kasliwal, M. M., Cenko, S. B., Singer, L. P., Corsi, A., Cao, Y., Barlow, T., Bhalerao, V., Bellm, E., Cook, D., Duggan, G. E., Ferretti, R., Frail, D. A., Horesh, A., Kendrick, R., Kulkarni, S. R., Lunnan, R., Palliyaguru, N., Laher, R., Masci, F., Manulis, I., Miller, A. A., Nugent, P. E., Perley, D., Prince, T. A., Quimby, R. M., Rana, J., Rebbapragada, U., Sesar, B., Singhal, A., Surace, J. and Van Sistine  
*iPTF Search for an Optical Counterpart to Gravitational-wave Transient GW150914*  
2016, *ApJ*, 824, L24
- 251. Vedantham, H. K., Ravi, V., Mooley, K., Frail, D., Hallinan, G., and Kulkarni, S. R.  
*On Associating Fast Radio Bursts with Afterglows*  
2016, *ApJ*, 824, L9.
- 250. Mooley, K. P., Hallinan, G., Bourke, S., Horesh, A., Myers, S. T., Frail, D. A., Kulkarni, S. R., Levitan, D. B., Kasliwal, M. M., Cenko, S. B., Cao, Y., Bellm, E., and Laher, R. R.  
*The Caltech-NRAO Stripe 82 Survey (CNSS). I. The Pilot Radio Transient Survey In 50 deg<sup>2</sup>*  
2016, *ApJ*, 818, 105.
- 249. Cucchiara, A., Veres, P., Corsi, A., Cenko, S. B., Perley, D. A., Lien, A., Marshall, F. E., Pagani, C., Toy, V. L., Capone, J. I., Frail, D. A., Horesh, A., Modjaz, M., Butler, N. R., Littlejohns, O. M., Watson, A. M., Kutyrev, A. S., Lee, W. H., Richer, M. G., Klein, C. R., Fox, O. D., Prochaska, J. X., Bloom, J. S., Troja, E., Ramirez-Ruiz, E., de Diego, J. A., Georgiev, L., Gonz'alez, J., Roman-Zuniga, C. G., Gehrels, N., and Moseley, H.

*Happy Birthday Swift: Ultra-long GRB 141121A, Its Broadband Afterglow*  
2016, *ApJ*, 812, 122.

248. Veres, P., Corsi, A., Frail, D. A., Cenko, S. B., and Perley, D. A.  
*Early-time VLA Observations, Broadband Afterglow Analysis of the Fermi/LAT Detected GRB 130907A*  
2015, *ApJ*, 810, 31.
247. De Pasquale, M., Kuin, N. P. M., Oates, S., Schulze, S., Cano, Z., Guidorzi, C., Beardmore, A., Evans, P. A., Uhm, Z. L., Zhang, B., Page, M., Kobayashi, S., Castro-Tirado, A., Gorosabel, J., Sakamoto, T., Fatkhullin, T., Pandey, S. B., Im, M., Chandra, P., Frail, D., Gao, H., Kopavc, D., Jeon, Y., Akerlof, C., Huang, K. Y., Pak, S., Park, W.-K., Gomboc, A., Melandri, A., Zane, S., Mundell, C. G., Saxton, C. J., Holland, S. T., Virgili, F., Urata, Y., Steele, I., Bersier, D., Tanvir, N., Sokolov, V. V., and Moskvitin, A. S.  
*The optical rebrightening of GRB100814A: An interplay of forward, reverse shocks?*  
2015, *MNRAS*, 449, 1024-1042.
246. Schulze, S., Malesani, D., Cucchiara, A., Tanvir, N.R., Kruhler, T., deUgarte Postigo, A., Leloudas, G., Lyman, J. Bersier, D., Wiersema, K., Perley, D.A., Schady, P., Gorosabel, J., Anderson, J.P., Castro-Tirado, A.J., Cenko, S.B., DeCia, A., Ellerbroek, L.E., Fynbo, J.P.U., Greiner, J. Hjorth, J., Kann, D.A., Kaper, L. Klose, S., Levan, A.J., Martin, S., O'Brien, P.T., Page, K.L., Pignata, G., Rapaport, S., Sanchez-Ramirez, R., Sollerman, J., Smith, I.A., Sparre, M., Thone, C.C., Watson, D.J., Xu, D., Bauer, F.E., Baylis, M. Bjornsson, G., Bremer, M., Cano, Z., Covino, S., D'Elia, V., Frail, D.A., Geier, S., Goldoni, P., Hartoog, O.E., Jakobsson, P., Korhonen, H., Lee, K.Y., Milvang-Jensen, B., Nardini, M., Nicuesa Guelbenzu, A., Oguri, M., Pandey, S.B., Petitpas, G., Rossi, A., Sandberg, A., Schmidl, S., Tagliaferri, G., Tilanus, R.P.J., Winters, J.M., Wright, D., Wuyts, E.  
*GRB 120422A/SN 2012 bz: Bridging the gap between low-and high-luminosity gamma-ray bursts*  
2014, *A&A*, Vol. 566, id. A102, 31 pp
245. Pihlstrom, Y.M., Sjouwerman, L.O., Frail, D.A., Claussen, M.J., Mesler, R.A., McEwen, B.C.  
*Detection of Class I Methanol (CH<sub>3</sub>OH) Maser Candidates in Supernova Remnants*  
2014, *Astronomical Journal*, Vol. 147, Issue 4, article id. 73, 8 pp
244. Corsi, A., Ofek, E.O., Gal-Yam, A., Frail, D.A., Kulkarni, S.R., Fox, D.B., Kasliwal, M.M., Sullivan, M., Horesh, A., Carpenter, J. Maguire, K., Arcavi, I., Cenko, S.B., Cao, Y., Mooley, K., Pan, Y.-C., Sesar, B., Sternberg, A., Xu, D., Bersier, D., James, P., Bloom, J.S., Nugent, P.E.  
*A Multi-wavelength Investigation of the Radio-loud Supernova PTF11qcj and its Circumstellar Environment*  
2014, *ApJ*, Vol. 782, Issue 1, article id. 42, 18 pp
243. Perley, D.A., Cenko, S.B., Corsi, A., Tanvir, N.R., Levan, A.J., Kann, D.A., Sonbas, E., Wiersema, K. Zheng, W., Zhao, X.-H., Bai, J.-M., Bremer, M. Castro-Tirado, A.J., Chang, L., Clubb, K.I., Frail, D.A., Fruchter, A. Gogus, E., Greiner, J. Guver, T., Horesh, A., Filippenko, A.V., Klose, S., Mao, J., Morgan, A.N., Pozanenko, A.S., Schmidl, S., Stecklum, B. Tanga, M., Volnova, A.A., Vovach, A.E., Wang, J.-G., Winters, J.-M, Xin, Y.-X.  
*The Afterglow of GRB 130427A from 1 to 10<sup>16</sup> GHz*  
2014, *ApJ*, Vol. 781, Issue 1, article id. 37, 21 pp
242. Murphy, T., Chatterjee, S., Kaplan, D.L., Banyer, J., Bell, M.E., Bignall, H.E., Bower, G.C., Cameron, R.A., Coward, D.M., Cordes, J.M., Croft, S., Curran, J.R., Djorgovski, S.G., Farrell, S.A., Frail, D.A., Gaensler, B.M., Galloway, D.K., Gentile, B., Green, A.I., Hancock, P.J.

Johnston, S., Kamble, A., Law, C.J., Lazio, T.J.W., Lo, K.K., Macquart, J.-P., Rea, N., Rebbapragada, U., Reynolds, C., Ryder, S.D., Schmidt, B., Soria, R., Stairs, I.H., Tingay, S.J., Torkelson, U., Wagstaff, K., Walker, M., Wayth, R.B., Williams, P.K.G.

*VAST: An ASKAP Survey for Variables and Slow Transients*

2013, *PASA*, Vol. 30, 006.27

241. Ofek, E.O., Fox, D., Cenko, S.B., Sullivan, M., Gnat, O., Frail, D.A., Horesh, A., Corsi, A., Quimby, R.M., Gehrels, N., Kulkarni, S.R., Gal-Yam, A., Nugent, P.E., Yaron, O., Filippenko, A.V., Kasliwal, M.M., Bildsten, L., Bloom, J.S., Poznanski, D., Arcavi, I., Laher, R.R., Levitan, D., Sesar, B., Surace, J.

*X-Ray Emission from Supernovae in Dense Circumstellar Matter Environments: A Search for Collisionless Shocks*

2013, *ApJ* Vol. 763, Issue 1, Article 42, 11pp

240. van Velzen, S., Frail, D.A., Kording, E., Falcke, H.

*Constraints on off-axis jets from stellar tidal disruption flares*

2013, *A&A*, A5

239. Mooley, K.P., Frail, D.A., Ofek, E.O., Miller, N.A., Kulkarni, S.R., Horesh, A.

*Sensitive Search for Radio Variables and Transients in the Extended Chandra Deep Field South*

2013, *ApJ*, Vol. 768, 165-185

238. Cenko, S.B., Kulkarni, S.R., Horesh, A., Corsi, A., Fox, D.B., Carpenter, J., Frail, D.A., Nugent, P.E., Perley, D.A., Gruber, D., Gal-Yam, A., Groot, P.J., Hallinan, G., Ofek, E.O., Rau, A., MacLeod, C.L., Miller, A.A., Bloom, J.S., Filippenko, A.V., Kasliwal, M.M., Law, N.M., Morgan, A.N., Polishook, D., Poznanski, D., Quimby, R.M., Sesar, B., Shen, J.J., Silverman, J.M., Sternberg, A.

*Discovery of a Cosmological, Relativistic Outburst via its Rapidly Fading Optical Emission*

2013, *ApJ*, Vol. 769, 130-146

237. Frail, D.A., Claussen, M.J., Mehault, J.

*Evidence of a Hadronic Origin for the TeV Source J1834-087*

2013, *ApJ*, Vol. 773, L19

236. Singer, L.P., Cenko, S.B., Kasliwal, M.M., Perley, D.A., Ofek, E.O., Brown, D.A., Nugent, P.E., Kulkarni, S.R., Corsi, A., Frail, D.A., Bellm, E., Mulchaey, J., Arcavi, I., Barlow, T., Bloom, J.S., Cao, Y., Gehrels, N., Horesh, A., Masci, F., McEnery, J., Rau, A., Surace, J.A., Yaron, O.

*Discovery and Redshift on an Optical Afterglow in 71 deg<sup>2</sup>: iPTF13bx1 and GRB 130702A*

2013, *ApJ*, Vol. 776, L34

235. Horesh, A., Kulkarni, S., Shrinivas, R., Corsi, A., Frail, D.A., Cenko, S.B., Ben-Ami, S., Gal-Yam, A., Yaron, O., Arcavi, I., Kasliwal, M.M., Ofek, E.O.

*PTF 12gzk- A Rapidly Declining, High-velocity Type Ic Radio Supernova*

2013, *ApJ*, Vol. 778, 63-68

234. Moin, A., Chandra, P., Miller-Jones, J.C.A., Tingay, S.J., Taylor, G.B., Frail, D.A., Wang, Z., Reynolds, C., Phillips, C.J.

*2013, Radio Observations of GRB 100418a: Test of an Energy Injection Model Explaining Long-lasting GRB Afterglows*

2013, *ApJ*, Vol. 779, 105-112

233. Horesh, A., Stockdale, C., Fox, D.B., Frail, D.A., Carpenter, J., Kulkarni, S.R., Ofek, E.O., Gal-Yam, A., Kasliwal, M.M., Arcavi, I., Quimby, R., Cenko, S.B., Nugent, P.E., Bloom, J.S., Law,

N.M., Poznanski, D., Gorbikov, E., Polishook, D., Yaron, Of., Ryder, S., Weiler, K., Bauer, F., VanDyk, S.D., Immler, S., Panagia, N., Pooley, D., Kassim, N.  
*An Early and comprehensive millimeter and centimeter wave and X-ray study of SN 2011dh: a non-equipartition blast wave expanding into a massive stellar wind*  
2013, *MNRA*, 436, 1258H

232. Cenko, S. B., Bloom, J. S., Kulkarni, S. R., Strubbe, L. E., Miller, A. A., Butler, N. R., Quimby, R. M., Gal-Yam, A., Ofek, E. O., Quataert, E., Bildsten, L., Poznanski, D., Perley, D. A., Morgan, A. N., Filippenko, A. V., Frail, D. A., Arcavi, I., Ben-Ami, S., Cucchiara, A., Fassnacht, C. D., Green, Y., Hook, I. M., Howell, D. A., Lagattuta, D. J., Law, N. M., Kasliwal, M. M., Nugent, P. E., Silverman, J. M., Sullivan, M., Tendulkar, S. P., and Yaron, O.  
*PTF10iya: a short-lived, luminous flare from the nuclear region of a star-forming galaxy*  
2012, *MNRAS*, 420, 2684-2699
231. Corsi, A., Ofek, E. O., Gal-Yam, A., Frail, D. A., Poznanski, D., Mazzali, P. A., Kulkarni, S. R., Kasliwal, M. M., Arcavi, I., Ben-Ami, S., Cenko, S. B., Filippenko, A. V., Fox, D. B., Horesh, A., Howell, J. L., Kleiser, I. K. W., Nakar, E., Rabinak, I., Sari, R., Silverman, J. M., Xu, D., Bloom, J. S., Law, N. M., Nugent, P. E., and Quimby, R. M.  
*Evidence for a Compact Wolf-Rayet Progenitor for the Type Ic Supernova PTF 10vgv*  
2012, 747, L5.
230. Frail, D. A., Kulkarni, S. R., Ofek, E. O., Bower, G. C. and Nakar, E.  
*A Revised View of the Transient Radio Sky*  
2012, *ApJ*, 747, 70-82.
229. Smith, N., Cenko, S. B., Butler, N., Bloom, J. S., Kasliwal, M.M., Horesh, A., Kulkarni, S. R., Law, N. M., Nugent, P. E., Ofek, E. O., Poznanski, D., Quimby, R. M., Sesar, B., Ben-Ami, S., Arcavi, I., Gal-Yam, A., Polishook, D., Xu, D., Yaron, O., Frail, D. A., and Sullivan, M.  
*SN 2010jp (PTF10aaxi): a jet in a Type II supernova*  
2012, *MNRAS*, 420, 1135-1144.
228. Chandra P. and Frail, D. A.  
*A Radio-selected Sample of Gamma-Ray Burst Afterglows*  
2012, *ApJ*, 746, 156-184.
227. Frail, D. A.  
*Supernova remnant shock - Molecular cloud interactions. Masers as tracers of hadronic particle acceleration*  
2011, *Memorie della Societa Astronomica Italiana*, 82, 703.
226. Guidorzi, C., Kobayashi, S., Perley, D. A., Vianello, G., Bloom, J. S., Chandra, P., Kann, D. A., Li, W., Mundell, C. G., Pozenenko, A., Prochaska, J. X., Antoniuik, K., Bersier, D., Filippenko, A. V., Frail, D. A., Gomboc, A., Klunko, E., Melandri, A., Mereghetti, S., Morgan, A. N., O'Brien, P. T., Rumyantsev, V., Smith, R. J., Steele, I. A., Tanvir, N. R., and Volnova, A.  
*A faint optical flash in dust-obscured GRB 080603A: implications for GRB prompt emission mechanisms.*  
2011, *MNRAS*, 417, 2124-2143.
225. Corsi, A., Ofek, E. O., Frail, D. A., Poznanski, D., Arcavi, I., Gal-Yam, A., Kulkarni, S. R., Hurley, K., Mazzali, P. A., Howell, D. A., Kasliwal, M. M., Green, Y., Murray, D., Sullivan, M., Xu, D., Benami, S., Bloom, J. S., Cenko, S. B., Law, N. M., Nugent, P., Quimby, R. M., Pal'shin, V., Cummings, J., Connaughton, V., Yamaoka, K., Rau, A., Boynton, W., Mitrofanov, I., and Goldsten, J.

*PTF 10bzf (SN 2010ah): A Broad-line Ic Supernova Discovered by the Palomar Transient Factory*  
2011, *ApJ*, 741, 76-189.

224. Ofek, E. O., Frail, D. A., Kulkarni, S. R., Chandra, P., Breslauer, B., Gal-Yam, A., Kasliwal, M. M. and Gehrels, N.  
*A VLA search for 5 GHz radio transients and variables in low Galactic latitudes*  
2011, *ApJ*, 740, 65-83.
223. Chandra, P. and Frail, D. A.  
*Gamma Ray Bursts and their afterglow properties*  
2011, *BASI*, 39, 451-470.
222. Wygoda, N, Waxman, E. and D. A. Frail  
*Relativistic Jet Dynamics and Calorimetry of Gamma-Ray Bursts*  
2011, *ApJ*, 738, L23-29.
221. Zauderer, B. A., Berger, E., Soderberg, A. M., Loeb, A., Narayan, R., Frail, D. A., Petitpas, G. R., Brunthaler, A., Chornock, R., Carpenter, J. M., Pooley, G. G., Mooley, K., Kulkarni, S. R., Margutti, R., Fox, D. B., Nakar, E., Patel, N. A., Volgenau, N. H., Culverhouse, T. L., Bietenholz, M. F., Rupen, M. P., Max-Moerbeck, W., Readhead, A. C. S., Richards, J., Shepherd, M., Storm, S., and Hull, C. L. H.  
*Birth of a relativistic outflow in the unusual -ray transient Swift J164449.3+573451*  
2011, *Nature*, 476, 425-428.
220. Ofek, E. O. and Frail, D. A.  
*The Structure Function of Variable 1.4 GHz Radio Sources Based on NVSS and FIRST Observations*  
2011, *ApJ*, 737, 45-52.
219. Gal-Yam, A., Kasliwal, M. M., Arcavi, I., Green, Y., Yaron, O., Ben-Ami, S., Xu, D., Sternberg, A., Quimby, R. M., Kulkarni, S. R., Ofek, E. O., Walters, R., Nugent, P. E., Poznanski, D., Bloom, J. S., Cenko, S. B., Filippenko, A. V., Li, W., Silverman, J. M., Walker, E. S., Sullivan, M., Maguire, K., Howell, D. A., Mazzali, P. A., Frail, D. A., Bersier, D., James, P. A., Akerlof, C. W., Yuan, F., Law, N., Fox, D. B., and Gehrels, N.  
*Real-time Detection and Rapid Multiwavelength Follow-up Observations of a Highly Subluminous Type II-P Supernova from the Palomar Transient Factory Survey*  
2011, *ApJ*, 736, 159-166.
218. A.J. Drake, S.G. Djorgovski, A. Mahabal, J. Anderson, R. Roy, V. Mohan, S. Ravindranath, D. Frail, S. Gezari, James D. Neill, L.C. Ho, J.L. Prieto, D. Thompson, J. Thorstensen, M. Wagner, R. Kowalski, J. Chiang, J.E. Grove, F.K. Schinzel, D.L. Wood, L. Carrasco, E. Recillas, L. Kewley, K.N. Archana, Aritra, Basu, Yogesh, Wadadekar, Brijesh Kumar, A.D. Myers R. Williams, M.J. Graham, M. Catelan, E. Beshore, S. Larson, E. Christensen  
*The Discovery and Nature of Optical Transient CSS100217:102913+404220*  
2011, *ApJ*, 735, 106-127.
217. Cenko, S. B., Frail, D. A., Harrison, F. A., Haislip, J. B., Reichart, D. E., Butler, N. R., Cobb, B. E., Cucchiara, A., Berger, E., Bloom, J. S., Chandra, P., Fox, D. B., Perley, D. A., Prochaska, J. X., Filippenko, A. V., Glazebrook, K., Ivarsen, K. M., Kasliwal, M. M., Kulkarni, S. R., LaCluyze, A. P., Lopez, S., Morgan, A. N., Pettini, M., & Rana, V. R.  
*Afterglow Observations of Fermi-LAT Gamma-Ray Bursts and the Emerging Class of Hyper-Energetic Events*  
2011, *ApJ*, 732, 20-56



216. Kasliwal, M. M., Kulkarni, S. R., Arcavi, I., Quimby, R. M., Ofek, E. O., Nugent, P., Jacobsen, J., Gal-Yam, A., Green, Y., Yaron, O., Fox, D. B., Howell, J. L., Cenko, S. B., Kleiser, I., Bloom, J. S., Miller, A., Li, W., Filippenko, A. V., Starr, D., Poznanski, D., Law, N. M., Helou, G., Frail, D. A., Neill, J. D., Forster, K., Martin, D. C., Tendulkar, S. P., Gehrels, N., Kennea, J., Sullivan, M., Bildsten, L., Dekany, R., Rahmer, G., Hale, D., Smith, R., Zolkower, J., Velur, V., Walters, R., Henning, J., Bui, K., McKenna, D., and Blake, C.  
*PTF10jqs: A Luminous Red Nova in the Spiral Galaxy Messier 99*  
2011, *ApJ*, 730, 134-145.
215. Cenko, S. B., Butler, N. R., Ofek, E. O., Perley, D. A., Morgan, A. N., Frail, D. A., Gorosabel, J., Bloom, J. S., Castro-Tirado, A. J., Cepa, J., Chandra, P., de Ugarte Postigo, A., Filippenko, A. V., Klein, C. R., Kulkarni, S. R., Miller, A. A., Nugent, P. E., and Starr, D. L.  
*Unveiling the Origin of GRB 090709A: Lack of Periodicity in a Reddened Cosmological Long-Duration Gamma-Ray Burst*  
2010, *AJ*, 140, 224-234.
214. Macquart, J.-P., Kanekar, N., Frail, D. A., and Ransom, S. M.  
*A High-frequency Search for Pulsars within the Central Parsec of Sgr A\**  
2010, *ApJ*, 715, 939-946.
213. Chandra, P., Frail, D. A., Fox, D., Kulkarni, S., Berger, E., Cenko, S. B., Bock, D. C.-J., Harrison, F. and Kasliwal, M.  
*Discovery of Radio Afterglow from the Most Distant Cosmic Explosion*  
2010, *ApJ*, 712, L31-L35.
212. Cenko, S. B., Frail, D. A., Harrison, F. A., Kulkarni, S. R., Nakar, E., Chandra, P., Butler, N. R., Fox, D. B., Gal-Yam, A., Kasliwal, M. M., Kelemen, J., Moon, D. -, Price, P. A., Rau, A., Soderberg, A. M., Teplitz, H. I., Werner, M. W., Bock, D. C. -, Bloom, J. S., Starr, D. A., Filippenko, A. V., Chevalier, R. A., Gehrels, N., Nousek, J. N., and Piran, T.  
*The Collimation and Energetics of the Brightest Swift Gamma-Ray Bursts*  
2010, *ApJ*, 711, 641-654.
211. Ofek, E. O., Breslauer, B., Gal-Yam, A., Frail, D., Kasliwal, M. M., Kulkarni, S. R., & Waxman, E.  
*Long-duration Radio Transients Lacking Optical Counterparts are Possibly Galactic Neutron Stars*  
2010, *ApJ*, 711, 517-531.
210. Cenko, S. B., Kelemen, J., Harrison, F. A., Fox, D. B., Kulkarni, S. R., Kasliwal, M. M., Ofek, E. O., Rau, A., Gal-Yam, A., Frail, D. A., and Moon, D.-S.  
*Dark Bursts in the Swift Era: The Palomar 60 Inch-Swift Early Optical Afterglow Catalog*  
2009, *ApJ*, 693, 1484-1493.
209. Perley, D. A., Li, W., Chornock, R., Prochaska, J. X., Butler, N. R., Chandra, P., Pollack, L. K., Bloom, J. S., Filippenko, A. V., Swan, H., Yuan, F., Akerlof, C., Auger, M. W., Cenko, S. B., Chen, H.-W., Fassnacht, C. D., Fox, D., Frail, D., Johansson, E. M., McKay, T., Le Mignant, D., Modjaz, M., Rujopakarn, W., Russel, R., Skinner, M. A., Smith, G. H., Smith, I., van Dam, M. A., and Yost, S.  
*GRB 071003: Broadband Follow-up Observations of a Very Bright Gamma-Ray Burst in a Galactic Halo*  
2008, *ApJ*, 688, 470-490.

208. Gal-Yam, A., Nakar, E., Ofek, E. O., Cenko, S. B., Kulkarni, S. R., Soderberg, A. M., Harrison, F., Fox, D. B., Price, P. A., Penprase, B. E., Frail, D. A., Atteia, J. L., Berger, E., Gladders, M., and Mulchaey, J.  
*New Imaging and Spectroscopy of the Locations of Several Short-Hard Gamma-Ray Bursts*  
2008, *ApJ*, 686, 408-416.
207. Chandra, P., Cenko, S. B., Frail, D. A., Chevalier, R. A., Macquart, J.-P., Kulkarni, S. R., Bock, D. C.-J., Bertoldi, F., Kasliwal, M., Fox, D. B., Price, P. A., Berger, E., Soderberg, A. M., Harrison, F. A., Gal-Yam, A., Ofek, E. O., Rau, A., Schmidt, B. P., Cameron, P. B., Cowie, L. L., Cowie, A., Roth, K. C., Dopita, M., Peterson, B., and Penprase, B. E.  
*A Comprehensive Study of GRB 070125, A Most Energetic Gamma-Ray Burst*  
2008, *ApJ*, 683, 924-942.
206. Kasliwal, M. M., Cenko, S. B., Kulkarni, S. R., Cameron, P. B., Nakar, E., Ofek, E. O., Rau, A., Soderberg, A. M., Campana, S., Bloom, J. S., Perley, D. A., Pollack, L. K., Barthelmy, S., Cummings, J., Gehrels, N., Krimm, H. A., Markwardt, C. B., Sato, G., Chandra, P., Frail, D., Fox, D. B., Price, P. A., Berger, E., Grebenev, S. A., Krivonos, R. A., and Sunyaev, R. A.  
*GRB 070610: A Curious Galactic Transient*  
2008, *ApJ*, 678, 1127-1135.
205. Cenko, S. B., Fox, D. B., Penprase, B. E., Cucchiara, A., Price, P. A., Berger, E., Kulkarni, S. R., Harrison, F. A., Gal-Yam, A., Ofek, E. O., Rau, A., Chandra, P., Frail, D. A., Kasliwal, M. M., Schmidt, B. P., Soderberg, A. M., Cameron, P. B., and Roth, K. C.  
*GRB 070125: The First Long-Duration Gamma-Ray Burst in a Halo Environment*  
2008, *ApJ*, 677, 441-447.
204. Berger, E., Fox, D. B., Price, P. A., Nakar, E., Gal-Yam, A., Holz, D. E., Schmidt, B. P., Cucchiara, A., Cenko, S. B., Kulkarni, S. R., Soderberg, A. M., Frail, D. A., Penprase, B. E., Rau, A., Ofek, E., Burnell, S. J. B., Cameron, P. B., Cowie, L. L., Dopita, M. A., Hook, I., Peterson, B. A., Podsiadlowski, P., Roth, K. C., Rutledge, R. E., Sheppard, S. S., & Songaila, A.  
*A New Population of High-Redshift Short-Duration Gamma-Ray Bursts*  
2007, *ApJ*, 664, 1000-1010.
203. Ofek, E. O., Cenko, S. B., Gal-Yam, A., Fox, D. B., Nakar, E., Rau, A., Frail, D. A., Kulkarni, S. R., Price, P. A., Schmidt, B. P., Soderberg, A. M., Peterson, B., Berger, E., Sharon, K., Shemmer, O., Penprase, B. E., Chevalier, R. A., Brown, P. J., Burrows, D. N., Gehrels, N., Harrison, F., Holland, S. T., Mangano, V., McCarthy, P. J., Moon, D.-S., Nousek, J. A., Persson, S. E., Piran, T., & Sari, R.  
*GRB 060505: A Possible Short-Duration Gamma-Ray Burst in a Star-forming Region at a Redshift of 0.09*  
2007, 662, 1129-1135.
202. Soderberg, A. M., Nakar, E., Cenko, S. B., Cameron, P. B., Frail, D. A., Kulkarni, S. R., Fox, D. B., Berger, E., Gal-Yam, A., Moon, D.-S., Price, P. A., Anderson, G., Schmidt, B. P., Salvo, M., Rich, J., Rau, A., Ofek, E. O., Chevalier, R. A., Hamuy, M., Harrison, F. A., Kumar, P., MacFadyen, A., McCarthy, P. J., Park, H. S., Peterson, B. A., Phillips, M. M., Rauch, M., Roth, M., & Sheckman, S.  
*A Spectacular Radio Flare from XRF 050416a at 40 Days, Implications for the Nature of X-Ray Flashes*  
2007, *ApJ*, 661, 982-994.
201. Berger, E., Fox, D. B., Kulkarni, S. R., Frail, D. A., & Djorgovski, S. G.  
*The ERO Host Galaxy of GRB 020127: Implications for the Metallicity of GRB Pro-genitors*  
2007 660 504 508

200. Ofek, E. O., Cameron, P. B., Kasliwal, M. M., Gal-Yam, A., Rau, A., Kulkarni, S. R., Frail, D. A., Chandra, P., Cenko, S. B., Soderberg, A. M., & Immler, S.  
*SN 2006gy: An Extremely Luminous Supernova in the Galaxy NGC 1260*  
2007, *659*, L13-L16.
199. Ofek, E. O., Kulkarni, S. R., Nakar, E., Cenko, S. B., Cameron, P. B., Frail, D. A., Gal-Yam, A., Soderberg, A. M., & Fox, D. B.  
*The Short-Hard GRB 051103: Observations, Implications for Its Nature*  
2006, *ApJ*, *652*, 507-511.
198. Gal-Yam, A., Fox, D. B., Price, P. A., Ofek, E. O., Davis, M. R., Leonard, D. C., Soderberg, A. M., Schmidt, B. P., Lewis, K. M., Peterson, B. A., Kulkarni, S. R., Berger, E., Cenko, S. B., Sari, R., Sharon, K., Frail, D., Moon, D.-S., Brown, P. J., Cucchiara, A., Harrison, F., Piran, T., Persson, S. E., McCarthy, P. J., Penprase, B. E., Chevalier, R. A., & MacFadyen, A. I.  
*A novel explosive process is required for the -ray burst GRB 060614*  
2006, *Nature*, *444*, 1053-1055.
197. Cenko, S. B., Kasliwal, M., Harrison, F. A., Pal'shin, V., Frail, D. A., Fox, D. B., Gal-Yam, A., Kulkarni, S. R., Moon, D.-S., Nakar, E., Ofek, E. O., Penprase, B. E., Price, P. A., Sari, R., Schmidt, B. P., Soderberg, A. M., Aptekar, R., Frederiks, D., Golenetskii, S., Burrows, D. N., Chevalier, R. A., Gehrels, N., McCarthy, P. J., Nousek, J. A., & Piran, T.  
*Multiwavelength Observations of GRB 050820A: An Exceptionally Energetic Event Followed from Start to Finish*  
2006, *ApJ*, *652*, 490-506.
196. Soderberg, A. M., Chevalier, R. A., Kulkarni, S. R., & Frail, D. A.  
*The Radio and X-Ray Luminous SN 2003bg and the Circumstellar Density Variations around Radio Supernovae*  
2006, *ApJ*, *651*, 1005-1018.
195. Gal-Yam, A., Nakar, E., Ofek, E., Fox, D. B., Cenko, S. B., Kulkarni, S. R., Soderberg, A. M., Harrison, F., Price, P. A., Penprase, B. E., Frail, D. A., Berger, E., Gladders, M., & J. Mulchaey  
*The Progenitors of Short-Hard Gamma-Ray Bursts from an Extended Sample of Events*  
2006, *ApJ*, in press; astro-ph/0509891
194. Soderberg, A. M., Berger, E., Kasliwal, M., Frail, D. A., Price, P. A., Schmidt, B. P., Kulkarni, S. R., Fox, D. B., Cenko, S. B., Gal-Yam, A., Nakar, E., & Roth, K. C.  
*The Afterglow, Energetics, and Host Galaxy of the Short-Hard Gamma-Ray Burst 051221a*  
2006, *ApJ*, *650*, 261-271.
193. Soderberg, A. M., Kulkarni, S. R., Nakar, E., Berger, E., Cameron, P. B., Fox, D. B., Frail, D., Gal-Yam, A., Sari, R., Cenko, S. B., Kasliwal, M., Chevalier, R. A., Piran, T., Price, P. A., Schmidt, B. P., Pooley, G., Moon, D.-S., Penprase, B. E., Ofek, E., Rau, A., Gehrels, N., Nousek, J. A., Burrows, D. N., Persson, S. E., & McCarthy, P. J.  
*Relativistic ejecta from X-ray flash XRF 060218 and the rate of cosmic explosions*  
2006, *Nature*, *442*, 1014-1017.
192. Frail, D. A., Cameron, P. B., Kasliwal, M., Nakar, E., Price, P. A., Berger, E., Gal-Yam, A., Kulkarni, S. R., Fox, D. B., Soderberg, A. M., Schmidt, B. P., Ofek, E., & Cenko, S. B.  
*An Energetic Afterglow from a Distant Stellar Explosion*  
2006, *ApJ*, *636*, L99-L102.

191. Gal-Yam, A., Ofek, E. O., Poznanski, D., Levinson, A., Waxman, E., Frail, D. A., Soderberg, A. M., Nakar, E., Li, W., & Filippenko, A. V.  
*Radio and Optical Follow-up Observations of a Uniform Radio Transient Search: Implications for Gamma-Ray Bursts and Supernovae*  
2006, *ApJ*, 639, 331-339.
190. Soderberg, A. M., Kulkarni, S. R., Price, P. A., Fox, D. B., Berger, E., Moon, D.-S., Cenko, S. B., Gal-Yam, A., Frail, D. A., Chevalier, R. A., Cowie, L., Da Costa, G. S., MacFadyen, A., McCarthy, P. J., Noel, N., Park, H. S., Peterson, B. A., Phillips, M. M., Rauch, M., Rest, A., Rich, J. Roth, K. Roth, M. Schmidt, B. P. Smith, R. C. & Wood, P. R.  
*An HST Study of the Supernovae Accompanying GRB 040924 GRB 041006*  
2006, *ApJ*, 636, 391-399.
189. Berger, E., Price, P. A., Cenko, S. B., Gal-Yam, A., Soderberg, A. M., Kasliwal, M., Leonard, D. C., Cameron, P. B., Frail, D. A., Kulkarni, S. R., Murphy, D. C., Krzeminski, W., Piran, T., Lee, B. L., Roth, K. C., Moon, D.-S., Fox, D. B., Harrison, F. A., Persson, S. E., Schmidt, B. P., Penprase, B. E., Rich, J., Peterson, B. A., & Cowie, L. L.  
*The afterglow and elliptical host galaxy of the short -ray burst GRB 050724*  
2005, *Nature*, 438, 988-990.
188. Berger, E., Kulkarni, S. R., Fox, D. B., Soderberg, A. M., Harrison, F. A., Nakar, E., Kelson, D. D., Gladders, M. D., Mulchaey, J. S., Oemler, A., Dressler, A., Cenko, S. B., Price, P. A., Schmidt, B. P., Frail, D. A., Morrell, N., Gonzalez, S., Krzeminski, W., Sari, R., Gal-Yam, A., Moon, D.-S., Penprase, B. E., Jayawardhana, R., Scholz, A., Rich, J., Peterson, B. A., Anderson, G., McNaught, R., Minezaki, T., Yoshii, Y., Cowie, L. L., & Pimblet, K.  
*Afterglows, Redshifts, and Properties of Swift Gamma-Ray Bursts*  
2005, *ApJ*, 634, 501-508.
187. Frail, D. A.  
*The Radio Afterglows of Gamma-Ray Bursts*  
2005, *Invited Review in "Cosmic Explosions, On the 10th Anniversary of SN1993J." Proceedings of IAU Colloquium 192. Edited by J.M.Marcaide and KurtW.Weiler.(Berlin: Springer), pp. 451-458.*
186. Fox, D. B., Frail, D. A., Price, P. A., Kulkarni, S. R., Berger, E., Piran, T., Soderberg, A. M., Cenko, S. B., Cameron, P. B., Gal-Yam, A., Kasliwal, M. M., Moon, D.-S., Harrison, F. A., Nakar, E., Schmidt, B. P., Penprase, B., Chevalier, R. A., Kumar, P., Roth, K., Watson, D., Lee, B. L., Sheckman, S., Phillips, M. M., Roth, M., McCarthy, P. J., Rauch, M., Cowie, L., Peterson, B. A., Rich, J., Kawai, N., Aoki, K., Kosugi, G., Totani, T., Park, H.-S., MacFadyen, A., & Hurley, K. C.  
*The afterglow of GRB 050709 and the nature of the short-hard -ray bursts*  
2005, *Nature*, 437, 845-850.
185. Smith, I. A., Tilanus, R. P. J., Tanvir, N., Barnard, V. E., Moriarty-Schieven, G. H., Frail, D. A., Wijers, R. A. M. J., Vreeswijk, P., Rol, E., & Kouveliotou, C.  
*SCUBA sub-millimeter observations of gamma-ray bursts. IV. GRB 021004, 021211,030115, 030226, 041006*  
2005, *A&A*, 439, 987-996.
184. Berger, E., Fox, D. B., Kulkarni, S. R., Krzeminski, W., Soderberg, A. M., Frail, D. A., Burrows, D. N., Cenko, S. B., Murphy, E. J., Price, P. A., Gal-Yam, A., Moon, D.-S., Gehrels, N., Freedman, W. L., Persson, S. E., Barthelmy, S., Hill, J. E., Nousek, J. A., & Moretti, A.  
*The Discovery of the Optical and Near-IR Afterglows of the First Swift Gamma-Ray Bursts*  
2005, *ApJ*, 629, 328-333.

183. Jakobsson, P., Frail, D. A., Fox, D. B., Moon, D.-S., Price, P. A., Kulkarni, S. R., Fynbo, J. P. U., Hjorth, J., Berger, E., McNaught, R. H., & Dahle, H.  
*The Radio Afterglow and Host Galaxy of the Dark GRB020819*  
2005, *ApJ*, 629, 45-51.
182. Soderberg, A. M., Kulkarni, S. R., Fox, D. B., Berger, E., Price, P. A., Cenko, S. B., Howell, D. A., Gal-Yam, A., Leonard, D. C., Frail, D. A., Moon, D., Chevalier, R. A., Hamuy, M., Hurley, K. C., Kelson, D., Koviak, K., Krzeminski, W., Kumar, P., MacFadyen, A., McCarthy, P. J., Park, H. S., Peterson, B. A., Phillips, M. M., Rauch, M., Roth, M., Schmidt, B. P., & Sheckman, S.  
*An HST Search for Supernovae Accompanying X-Ray Flashes*  
2005, *ApJ*, 627, 877-887.
181. Cameron, P. B., Chandra, P., Ray, A., Kulkarni, S. R., Frail, D. A., Wieringa, M. H., Nakar, E., Phinney, E. S., Miyazaki, A., Tsuboi, M., Okumura, S., Kawai, N., Menten, K. M., & Bertoldi, F.  
*Detection of a radio counterpart to the 27 December 2004 giant flare from SGR 1806-20*  
2005, *Nature*, 434, 1112-1115.
180. Soderberg, A. M., Kulkarni, S. R., Berger, E., Chevalier, R. A., Frail, D. A., Fox, D. B. & Walker, R. C.  
*The Radio and X-ray Luminous Type Ibc Supernova 2003L*  
2005, *ApJ*, 621, 908-920.
179. Frail, D. A., A. M. Soderberg, S. R. Kulkarni, E. Berger, S. A. Yost, D. W. Fox, & F. A. Harrison  
*Accurate Calorimetry of GRB030329*  
2005, *ApJ*, 619, 994-998.
178. Frail, D. A.  
*Gamma-Ray Bursts: Jets and Energetics*  
2004, *Invited Review in "The Restless High-Energy Universe" Proceedings of the 2<sup>nd</sup> BeppoSAX Conference. Edited by E.P.J. van den Heuvel, R.A.M.J. Wijers, & J.J.M. in't Zand (Nuclear Physics B - Vol. 132), pp. 255-262.*
177. Bietenholz, M. F., Hester, J. J., Frail, D. A. & Bartel, N.  
*The Crab Nebula's Wisps in Radio and Optical*  
2004, *ApJ*, 615, 794-804.
176. Berger, E., Kulkarni, S. R. & Frail, D. A.  
*The Nonrelativistic Evolution of GRBs 980703 and 970508: Beaming-independent Calorimetry*  
2004, *ApJ*, 612, 966-973.
175. Stern, D., van Dokkum, P. G., Nugent, P., Sand, D. J., Ellis, R. S., Sullivan, M., Bloom, J. S., Frail, D. A., Kneib, J.-P., Koopmans, L. V. E., & Treu, T.  
*Discovery of a Transient U-Band Dropout in a Lyman Break Survey: A Tidally Disrupted Star at  $z=3.3$ ?*  
2004, *ApJ*, 612, 690-697.
174. Soderberg, A. M., Kulkarni, S. R., Berger, E., Fox, D. W., Sako, M., Frail, D. A., Gal-Yam, A., Moon, D. S., Cenko, S. B., Yost, S. A., Phillips, M. M., Persson, S. E., Freedman, W. L., Wyatt, P., Jayawardhana, R., & Paulson, D.  
*The sub-energetic -ray burst GRB031203 as a cosmic analog to the nearby GRB980425*  
2004, *Nature*, 430, 648-650.
173. Gehrels, N., Chincarini, G., Giommi, P., Mason, K. O., Nousek, J. A., Wells, A. A., White, N. E., Barthelmy, S. D., Burrows, D. N., Cominsky, L. R., Hurley, K. C., Marshall, F. E., Mészáros, P.

Roming, P. W. A., Angelini, L., Barbier, L. M., Belloni, T., Campana, S., Caraveo, P. A., Chester, M. M., Citterio, O., Cline, T. L., Cropper, M. S., Cummings, J. R., Dean, A. J., Feigelson, E. D., Fenimore, E. E., Frail, D. A., Fruchter, A. S., Garmire, G. P., Gendreau, K., Ghisellini, G., Greiner, J., Hill, J. E., Hunsberger, S. D., Krimm, H. A., Kulkarni, S. R., Kumar, P., Lebrun, F., Lloyd-Ronning, N. M., Markwardt, C. B., Mattson, B. J., Mushotzky, R. F., Norris, J. P., Osborne, J., Paczynski, B., Palmer, D. M., Park, H.-S., Parsons, A. M., Paul, J., Rees, M. J., Reynolds, C. S., Rhoads, J. E., Sasseen, T. P., Schaefer, B. E., Short, A. T., Smale, A. P., Smith, I. A., Stella, L., Tagliaferri, G., Takahashi, T., Tashiro, M., Townsley, L. K., Tueller, J., Turner, M. J. L., Vietri, M., Voges, W., Ward, M. J., Willingale, R., Zerbi, F. M., & Zhang, W. W.

*The Swift Gamma-Ray Burst Mission*

2004, *ApJ*, 611, 1005-1020.

172. Becker, A. C., Wittman, D. M., Boeshaar, P. C., Clocchiatti, A., Dell'Antonio, I. P., Frail, D. A., Halpern, J., Margoniner, V. E., Norman, D., Tyson, J. A., & Schommer, R. A.

*The Deep Lens Survey Transient Search. I. Short Timescale and Astrometric Variability*

2004, *ApJ*, 611, 418-433.

171. Kaplan, D. L., Frail, D. A., Gaensler, B. M., Gotthelf, E. V., Kulkarni, S. R., Slane, P. O., & Nechita, A.

*An X-Ray Search for Compact Central Sources in Supernova Remnants. I. SNRS G093.3+6.9, G315.4-2.3, G084.2+0.8, and G127.1+0.5*

2004, *ApJ Supp.*, 153, 269-315.

170. Gal-Yam, A., Moon, D.-S., Fox, D.B., Soderberg, A.M., Kulkarni, S.R., Berger, E., Cenko, S.B., Yost, S., Frail, D. A., Sako, M., Freedman, W.L., Persson, S.E., Wyatt, P., Murphy, D. C., Phillips, M.M., Suntzeff, N.B., Mazzali, P.A., & Nomoto, K.

*The J-Band Light Curve of SN 2003lw, Associated with GRB031203*

2004, *ApJ*, 609, L59-L62.

169. Taylor, G. B., Frail, D. A., Berger, E. & Kulkarni, S. R.

*The Angular Size and Proper Motion of the Afterglow of GRB030329*

2004, *ApJ*, 609, L1-L4.

168. Soderberg, A. M., Frail, D. A. & Wieringa, M. H.

*Constraints on Off-Axis Gamma-Ray Burst Jets in Type Ibc Supernovae from Late-Time Radio Observations*

2004, *ApJ*, 607, L13-L16.

167. Soderberg, A. M., Kulkarni, S. R., Berger, E., Fox, D. B., Price, P. A., Yost, S. A., Hunt, M. P., Frail, D. A., Walker, R. C., Hamuy, M., Sheckman, S. A., Halpern, J. P., & Mirabal, N.

*A Redshift Determination for XRF 020903: First Spectroscopic Observations of an X-Ray Flash*

2004, *ApJ*, 606, 994-999.

166. Frail, D. A., Metzger, B. D., Berger, E., Kulkarni, S. R., & Yost, S. A.

*A Late-Time Flattening of Afterglow Light Curves*

2004, *ApJ*, 600, 828-833.

165. Bloom, J. S., Fox, D., van Dokkum, P. G., Kulkarni, S. R., Berger, E., Djorgovski, S. G., & Frail, D. A.

*The First Two Host Galaxies of X-Ray Flashes: XRF 011030 and XR020427*

2003, *ApJ*, 599, 957-963.

164. Berger, E., Kulkarni, S. R., & Frail, D. A., Soderberg, A. M.

*A Radio Survey of Type Ib and Ic Supernovae: Searching for Engine Driven Supernovae*

2003, *ApJ*, 599, 408-418.

163. Berger, E., Kulkarni, S. R., Pooley, G., Frail, D. A., McIntyre, V., Wark, R. M., Sari, R., Soderberg, A. M., Fox, D. W., Yost, S., & Price, P. A.  
*A common origin for cosmic explosions inferred from calorimetry of GRB030329*  
2003, *Nature*, 426, 154-157.
162. Yost, S. A., Harrison, F. A., Sari, R. & Frail, D. A.  
*A Study of the Afterglows of Four Gamma-Ray Bursts: Constraining the Explosion and Fireball Model*  
2003, *ApJ*, 597, 459-473.
161. Sheth, K., Frail, D. A., White, S., Das, M., Bertoldi, F., Walter, F., Kulkarni, S. R., & Berger, E.  
*Millimeter Observations of GRB030329: Continued Evidence for a Two-Component Jet*  
2003, *ApJ*, 595, L33-L36.
160. Price, P. A., Fox, D. W., Kulkarni, S. R., Peterson, B. A., Schmidt, B. P., Soderberg, A. M., Yost, S. A., Berger, E., Djorgovski, S. G., Frail, D. A., Harrison, F. A., Sari, R., Blain, A. W. & Chapman, S. C.  
*The Bright Optical Afterglow of the Nearby -Ray Burst of 29 March 2003*  
2003, *Nature*, 423, 844-847.
159. Berger, E., Soderberg, A. M., Frail, D. A., & Kulkarni, S. R.  
*A Radio Flare from GRB 020405: Evidence for a Uniform Medium around a Massive Stellar Progenitor*  
2003, *ApJ*, 587, L5-L8.
158. Kaplan, D. L., van Kerkwijk, M. H., Marshall, H. L., Jacoby, B. A., Kulkarni, S. R., & Frail, D. A.  
*The Nearby Neutron Star RXJ0720.4-3125 from Radio to X-Rays*  
2003, *ApJ*, 590, 1008-1019.
157. Carilli, C. L., Ivison, R. J., & Frail, D. A.  
*Variability of Submillijansky Radio Sources*  
2003, *ApJ*, 590, 192-196.
156. D. A. Frail, S. R. Kulkarni, E. Berger, & M. H. Wieringa  
*A Complete Catalog of Radio Afterglows: The First Five Years*  
2003, *AJ*, 125, 2299-2306.
155. Bloom, J. S., Frail, D. A. & Kulkarni, S. R.  
*GRB Energetics and the GRB Hubble Diagram: Promises and Limitations*  
2003, *ApJ*, 594, 674-683.
154. Frail, D. A. Yost, S. A., Berger, E., Harrison, F. A., Sari, R., Kulkarni, S. R., Taylor, G. B., Bloom, J. S., Fox, D. W., Moriarty-Schieven, G. H., & Price, P. A.  
*The Broadband Afterglow of GRB980703*  
2003, *ApJ*, 590, 992-998.
153. Fox, D. W., Yost, S., Kulkarni, S. R., Torii, K., Kato, T., Yamaoka, H., Sako, M., Harrison, F. A., Sari, R., Price, P. A., Berger, E., Soderberg, A. M., Djorgovski, S. G., Barth, A. J., Pravdo, S. H., Frail, D. A., Gal-Yam, A., Lipkin, Y., Mauch, T., Harrison, C., & Buttery, H.  
*Early optical emission from the -ray burst of 4 October 2002*  
2003, *Nature*, 422, 284-286.

152. Perna, R., Sari, R. & Frail, D.  
*Jets in GRBs: Uniform or Variable Energy Profile?*  
2003, *ApJ*, 594, 379-384.
151. Fox, D. W., Price, P. A., Soderberg, A. M., Berger, E., Kulkarni, S. R., Sari, R., Frail, D. A., Harrison, F. A., Yost, S. A., Matthews, K., Peterson, B. A., Tanaka, I., Christiansen, J., & Moriarty-Schieven, G. H.  
*Discovery of Early Optical Emission from GRB021211*  
2003, *ApJ*, 586, L5-L8.
150. S. G. Djorgovski, S. R. Kulkarni, D. A. Frail, F. A. Harrison, J. S. Bloom, E. Berger, P. A. Price, D. Fox, A. M. Soderberg, T. J. Galama, D. E. Reichart, R. Sari, S. Yost, A. A. Mahabal, S. M. Castro, R. Goodrich, & F. Chaffee  
*The Cosmic Gamma-Ray Bursts and Their Host Galaxies in a Cosmological Context*  
2003, Invited review in "Discoveries and Research Prospects from 6-10m Class Telescopes"  
ed. P. Guhathakurta  
(*Proc. SPIE*, vol. 4834), pp. 423-430.
149. Berger, E., Kulkarni, S. R., & Frail, D. A.  
*A Standard Kinetic Energy Reservoir in Gamma-Ray Burst Afterglows*  
2003, *ApJ*, 590, 379-385.
148. Galama, T. J., Reichart, D., Brown, T. M., Kimble, R. A., Price, P. A., Berger, E., Frail, D. A., Kulkarni, S. R., Yost, S. A., Gal-Yam, A., Bloom, J. S., Harrison, F. A., Sari, R., Fox, D., & Djorgovski, S. G.  
*Hubble Space Telescope and Ground-Based Optical and Ultraviolet Observations of GRB010222*  
2003, *ApJ*, 587, 135-142.
147. Bloom, J. S., Berger, E., Kulkarni, S. R., Djorgovski, S. G., & Frail, D. A.  
*The redshift determination of GRB 990506 and GRB 000418 with the Echelle Spectrograph Imager on Keck*  
2003, *AJ*, 125, 999-1005.
146. Galama, T. J., Frail, D. A., Sari, R., Berger, E., Taylor, G. B., & Kulkarni, S. R.  
*Continued Radio Monitoring of the Gamma Ray Burst 991208*  
2003, *ApJ*, 585, 899-907.
145. Berger, E., Cowie, L. L., Kulkarni, S. R., Frail, D. A., Aussel, H., & Barger, A. J.  
*A Submillimeter and Radio Survey of Gamma-Ray Burst Host Galaxies: A Glimpse into the Future of Star Formation Studies*  
2003, *ApJ*, 588, 99-112.
144. Kulkarni, S. R., Kaplan, D. L., Marshall, H. L., Frail, D. A., Murakami, T., & Yonetoku, D.  
*The Quiescent Counterpart of the Soft Gamma-ray Repeater SGR 0526-66*  
2003, *ApJ*, 585, 948-954.
143. Price, P. A., Kulkarni, S. R., Berger, E., Fox, D. W., Bloom, J. S., Djorgovski, S. G., Frail, D. A., Galama, T. J., Harrison, F. A., McCarthy, P., Reichart, D. E., Sari, R., Yost, S. A., Jerjen, H., Flint, K., Phillips, A., Warren, B. E., Axelrod, T. S., Chevalier, R. A., Holtzman, J., Kimble, R. A., Schmidt, B. P., Wheeler, J. C., Frontera, F., Costa, E., Piro, L., Hurley, K., Cline, T., Guidorzi, C., Montanari, E., Mazets, E., Golenetskii, S., Mitrofanov, I., Anfinov, D., Kozyrev, A., Litvak, M., Sanin, A., Boynton, W., Fellows, C., Harshman, K., Shinohara, C., Gal-Yam, A., Ofek, E., & Liubin, V.



*Discovery of GRB 020405 and Its Late Red Bump.*  
2003, *ApJ*, 589, 838-843.

142. Berger, E., Kulkarni, S. R., Bloom, J. S., Price, P. A., Fox, D. W., Frail, D. A., Axelrod, T. S., Chevalier, R. A., Colbert, E., Costa, E., Djorgovski, S. G., Frontera, F., Galama, T. J., Halpern, J. P., Harrison, F. A., Holtzman, J., Hurley, K., Kimble, R. A., McCarthy, P. J., Piro, L., Reichart, D., Ricker, G. R., Sari, R., Schmidt, B. P., Wheeler, J. C., Vanderpekk, R., & Yost, S. A.  
*The Faint Optical Afterglow and Host Galaxy of GRB 020124: Implications for the Nature of Dark Gamma-Ray Bursts.*  
2002, *ApJ*, 581, 981-987.
141. Price, P. A., Kulkarni, S. R., Schmidt, B. P., Galama, T. J., Bloom, J. S., Berger, E., Frail, D. A., Djorgovski, S. G., Fox, D. W., Henden, A. A., Klose, S., Harrison, F. A., Reichart, D. E., Sari, R., Yost, S. A., Axelrod, T. S., McCarthy, P., Holtzman, J., Halpern, J. P., Kimble, R. A., Wheeler, J. C., Chevalier, R. A., Hurley, K., Ricker, G. R., Costa, E., Frontera, F., & Piro, L.  
*GRB 010921: Strong Limits on an Underlying Supernova from the HST*  
2003, *ApJ*, 584, 931-936.
140. Mirabal, N., Halpern, J. P., Kulkarni, S. R., Castro, S., Bloom, J. S., Djorgovski, S. G., Galama, T. J., Harrison, F. A., Frail, D. A., Price, P. A., Reichart, D. E., Ebeling, H., Bunker, A., Dawson, S., Dey, A., Spinrad, H., & Stern, D.  
*Time-Dependent Optical Spectroscopy of GRB 010222: Clues to the GRB Environment.*  
2002, *ApJ*, 578, 818-832.
139. Yost, S. A., Frail, D. A., Harrison, F. A., Sari, R., Reichart, D., Bloom, J. S., Kulkarni, S. R., Moriarty-Schieven, G. H., Djorgovski, S. G., Price, P. A., Goodrich, R. W., Larkin, J. E., Walter, F., Shepherd, D. S., Fox, D. W., Taylor, G. B., Berger, E., & Galama, T. J.  
*The Broadband Afterglow of GRB980329*  
2002, *ApJ*, 577, 155-163.
138. Bloom, J. S., Kulkarni, S. R., Price, P. A., Reichart, D., Galama, T. J., Schmidt, B. P., Frail, D. A., Berger, E., McCarthy, P. J., Chevalier, R. A., Wheeler, J. C., Halpern, J. P., Fox, D. W., Djorgovski, S. G., Harrison, F. A., Sari, R., Axelrod, T. S., Kimble, R. A., Holtzman, J., Hurley, K., Frontera, F., Piro, L., & Costa, E.  
*Detection of a Supernova Signature Associated with GRB 011121*  
2002, *ApJ*, 572, L45-L49.
137. Price, P. A., Berger, E., Reichart, D. E., Kulkarni, S. R., Yost, S. A., Subrahmanyan, R., Wark, R. M., Wieringa, M. H., Frail, D. A., Bailey, J., Boyle, B., Corbett, E., Gunn, K., Ryder, S. D., Seymour, N., Koviak, K., McCarthy, P., Phillips, M., Axelrod, T. S., Bloom, J. S., Djorgovski, S. G., Fox, D. W., Galama, T. J., Harrison, F. A., Hurley, K., Sari, R., Schmidt, B. P., Brown, M. J. I., Cline, T., Frontera, F., Guidorzi, C., & Montanari, E.  
*GRB 011121: A Massive Star Progenitor*  
2002, *ApJ*, 572, L51-L55.
136. L. Piro, D. A. Frail, J. Gorosabel, G. Garmire, P. Soffitta, L. Amati, M. I. Andersen, L. A. Antonelli, E. Berger, F. Frontera, J. Fynbo, G. Gandolfi, M. R. Garcia, J. Hjorth, J. in 't Zand, B. L. Jensen, N. Masetti, P. Møller, H. Pedersen, E. Pian, & M. H. Wieringa  
*The Bright Gamma-Ray Burst of February 10, 2000: A Case Study of an Optically Dark GRB.*  
2002, *ApJ*, 577, 680-690.
135. P.A. Price, S.R. Kulkarni, E. Berger, S.G. Djorgovski, D. A. Frail, A. Mahabal, D.W. Fox, F.A. Harrison, J.S. Bloom, S.A. Yost, D.E. Reichart, A.A. Henden, G.R. Ricker, R. van der Spek, K. Hurley, J. I. Atteia, N. Kawai, E. Fenimore, C. Graziani

*GRB 010921: Discovery of the First HETE Afterglow.*  
2002, *ApJ*, 571, L121-L125.

134. P. A. Price, E. Berger, S. R. Kulkarni, S. G. Djorgovski, D. W. Fox, A. Mahabal, K. Hurley, J. S. Bloom, D. A. Frail, T. J. Galama, F. A. Harrison, G. Morrison, D. E. Reichart, S. A. Yost, R. Sari, T. S. Axelrod, T. Cline, S. Golenetskii, E. Mazets, B. P. Schmidt, J. Trombka  
*The Unusually Long Duration Gamma-ray Burst GRB000911*  
2002, *ApJ*, 573, 85-91.
133. D. A. Frail, F. Bertoldi, G. H. Moriarty-Schieven, E. Berger, P. A. Price, J. S. Bloom, R. Sari, S. R. Kulkarni, C. L. Gerardy, D. E. Reichart, S. G. Djorgovski, T. J. Galama, F. A. Harrison, F. Walter, D. S. Shepherd, J. Halpern, A. B. Peck, K. M. Menten, S. A. Yost, D. W. Fox  
*GRB010222: A Burst Within a Starburst*  
2002, *ApJ*, 565, 829-835.
132. D. L. Kaplan, D. W. Fox, S. R. Kulkarni, E. V. Gotthelf, G. Vasisht, D. A. Frail  
*Precise Chandra Localization of the Soft Gamma-ray Repeater SGR1806-20*  
2002, *ApJ*, 564, 935-940.
131. S. G. Djorgovski, S. R. Kulkarni, J. S. Bloom, D. A. Frail, F. A. Harrison, T. J. Galama, D. Reichart, S. M. Castro, D. Fox, R. Sari, E. Berger, P. Price, S. Yost, R. Goodrich, F. Chaffee  
*The GRB Host Galaxies and Redshifts*  
2001, *Invited review, To appear in proc. "Gamma-Ray Bursts in the Afterglow Era: 2nd Workshop"*, eds. N. Masetti et al., *ESO Astrophysics Symposia, Berlin: Springer Verlag*, (in press; astro-ph/0107535)
130. D. W. Fox, D. L. Kaplan, S. R. Kulkarni, D. A. Frail  
*High-Resolution X-ray and Radio Observations of SGR 1900+14 in the Immediate Aftermath of a Giant Flare*  
2001, *ApJ* (in press; astro-ph/0107520)
129. D. A. Frail, S. R. Kulkarni, R. Sari, S. G. Djorgovski, J. S. Bloom, T. J. Galama, D. E. Reichart, E. Berger, F. A. Harrison, P. A. Price, S. A. Yost, A. Diercks, R. W. Goodrich, F. Chaffee  
*Beaming in Gamma-Ray Bursts: Evidence for a Standard Energy Reservoir*  
2001, *ApJ*, 562, L55-L58.
128. D. L. Kaplan, S. R. Kulkarni, D. A. Frail, M. H. van Kerkwijk  
*Deep Radio, Optical, and Infrared Observations of SGR 1900+14*  
2002, *ApJ*, 566, 378-386.
127. K. Hurley, E. Berger, A. Castro-Tirado, J. M. Castro Ceron, T. Cline, M. Feroci, D. A. Frail, F. Frontera, N. Masetti, C. Guidorzi, D. H. Hartmann, A. Henden, S. E. Levine, E. Mazets, S. Golenetskii, D. Frederiks, G. Morrison, A. Oksanen, M. Moilanen, H.-S. Park, P. A. Price, J. Prochaska, J. Trombka, G. Williams  
*Afterglow upper limits for four short duration, hard spectrum gamma-ray bursts*  
2002, *ApJ*, 567, 447-453.
126. S. G. Djorgovski, D. A. Frail, S. R. Kulkarni, R. Sari, J. S. Bloom, T. J. Galama, F. A. Harrison, P. A. Price, D. Fox, D. Reichart, S. Yost, E. Berger, A. Diercks, R. Goodrich, F. Chaffee  
*The Cosmic Gamma-Ray Bursts*  
2001, *An invited review, To appear in: Proc. IX Marcel Grossmann Meeting*, eds. V. Gurzadyan, R. Jantzen, and R. Ruffini, *Singapore: World Scientific*, (in press; astro-ph/0106574)

125. E. Berger, S. R. Kulkarni, D. A. Frail  
*The Host Galaxy of GRB980703 at Radio Wavelengths – a Nuclear Starburst in a ULIRG*  
2001, *ApJ*, 560, 652-658.
124. Harrison, F. A., Yost, S. A., Sari, R., Berger, E., Galama, T. J., Holtzman, J., Axelrod, T., Bloom, J. S., Chevalier, R., Costa, E., Diercks, A., Djorgovski, S. G., Frail, D. A., Frontera, F., Hurley, K., Kulkarni, S. R., McCarthy, P., Piro, L., Pooley, G. G., Price, P. A., Reichart, D., Ricker, G. R., Shepherd, D., Schmidt, B., Walter, F., & Wheeler, C.  
*Broadband Observations of the Afterglow of GRB 000926: Observing the Effect of In-verse Compton Scattering*  
2001, *ApJ*, 559, 123-130.
123. Piro, L., Garmire, G., Garcia, M. R., Antonelli, L. A., Costa, E., Feroci, M., Frail, D. A., Harrison, F., Hurley, K., Mészáros, P., & Waxman, E.  
*The X-Ray Afterglow of GRB 000926 Observed by BeppoSAX and Chandra: A Mildly Collimated Fireball in a Dense Medium?*  
2001, *ApJ*, 558, 442-447.
122. Bloom, J. S., Frail, D. A., & Sari, R.  
*The Prompt Energy Release of Gamma-Ray Bursts using a Cosmological k-Correction*  
2001, *AJ*, 121, 2879-2888.
121. Berger, E., Ball, S., Becker, K. M., Clarke, M., Frail, D. A., Fukuda, T. A., Hoffman, I. M., Mellon, R., Momjian, E., Murphy, N. W., Teng, S. H., Woodruff, T., Zauderer, B. A., & Zavala, R. T.  
*Discovery of radio emission from the brown dwarf LP944–20*  
2001, *Nature*, 410, 338-340.
120. Giacani, E. B., Frail, D. A., Goss, W. M., Vieytes, M.  
*Pulsar Wind Nebula around the southern pulsars PSR B1643–43 and PSR B1706–44*  
2001, *AJ*, 121, 3133-3137.
119. Berger, E., Diercks, A., Frail, D. A., Kulkarni, S. R., Bloom, J. S., Sari, R., Halpern, J., Mirabal, N., Taylor, G. B., Hurley, K., Pooley, G., Becker, K. M., Wagner, R. M., Terndrup, D. M., Statler, T., Wik, D. R., Mazets, E., Cline, T.  
*GRB000418: A Hidden Jet Revealed*  
2001, *ApJ*, 556, 556-561.
118. Djorgovski, S. G., Frail, D. A., Kulkarni, S. R., Bloom, J. S., Odewahn, S. C. & Diercks, A.  
*The Afterglow and the Host Galaxy of the Dark Burst GRB 970828*  
2001, *ApJ*, 562, 654-663.
117. Kulkarni, S. R., Kaplan, D. L., Marshall, H. L., Frail, D. A., Murakami, T. & Yonetoku, D.  
*The Quiescent Counterpart of the Soft Gamma-ray Repeater SGR 0526–66: A Link to the Enigmatic Anomalous X-ray Pulsars*  
2001, *Nature* (submitted).
116. Bietenholz, M. F., Frail, D. A. & Hester, J. J.  
*The Crab Nebula's Moving Wisps in Radio*  
2001, *ApJ*, 560, 254-260.
115. Olbert, C., Clearfield, C., Williams, N., Keohane, J. W. & Frail, D. A.  
*A Bow-Shock Nebula Around a Compact X-ray Source in the Supernova Remnant IC443*

2001, *ApJ*, 554, L205-L208.

114. Price, P. A., Harrison, F. A., Galama, T. J., Reichart, D. E., Axelrod, T. S., Berger, E., Bloom, J. S., Busche, J., Cline, T., Diercks, A., Djorgovski, S. G., Frail, D. A., Gal-Yam, A., Halpern, J., Holtzman, J. A., Hunt, M., Hurley, K., Jacoby, B., Kimble, R., Kulkarni, S. R., Mirabal, N., Morrison, G., Ofek, E., Pevunova, O., Sari, R., Schmidt, B. P., Turnshek, D., & Yost, S.  
*Multi-Color Observations of the GRB000926 Afterglow*  
2001, *ApJ*, 549, L7-L10.
113. Piro, L., Garmire, G., Garcia, M., Stratta, G., Costa, E., Feroci, M., Meszaros, P., Vietri, M., Bradt, H., Frail, D., Frontera, F., Halpern, J., Heise, J., Hurley, K., Kawai, N., Kippen, R. M., Marshall, F., Murakami, T., Sokolov, V. V., Takeshima, T. & Yoshida, A.,  
*Observation of X-ray lines from a gamma-ray burst (GRB 991216): Evidence of moving ejecta from the progenitor*  
2000, *Science*, 290, 955-958.
112. T. J. Galama, M. Bremer, F. Bertoldi, K.M. Menten, U. Lisenfeld, D. S. Shepherd, B. Mason, F. Walter, G. G. Pooley, D. A. Frail, R. Sari, S. R. Kulkarni, E. Berger, J. S. Bloom, A. J. Castro-Tirado & J. Granot  
*The Bright Gamma-Ray Burst 991208 - Tight Constraints on Afterglow Models from Observations of the Early-Time Radio Evolution*  
2000, *ApJ (Let)*, 541, L45-L49.
111. Gaensler, B. M. & Frail, D. A.  
*A large age for the pulsar B1757-24 from an upper limit on its proper motion* 2000, *Nature*, 406, 158-160.
110. E. Berger, R. Sari, D. A. Frail, S. R. Kulkarni, F. Bertoldi, A. Peck, K. Menten, D. S. Shepherd, G. H. Moriarty-Schieven, G. Pooley, J. S. Bloom, A. Diercks, T. J. Galama, & K. Hurley  
*A Jet Model for the Afterglow Emission from GRB000301C*  
2000, *ApJ*, 545, 56-62.
109. Gaensler, B. M., Stappers, B. W., Frail, D. A., Moffett, D. A., Johnston, S., Chatterjee, S.  
*Limits on radio emission from pulsar wind nebulae*  
2000, *MNRAS*, 318, 58-66.
108. D. A. Frail, E. Berger, T. Galama, S. R. Kulkarni, G. H. Moriarty-Schieven, G. G. Pooley, R. Sari, D. S. Shepherd, G. B. Taylor & F. Walter  
*The Enigmatic Radio Afterglow of GRB 991216*  
2000, *ApJ (Let)*, 538, L129-L132.
107. Frontera, F., Antonelli, L. A., Amati, L., Montanari, E., Costa, E., Dal Fiume, D., Giommi, P., Feroci, M., Gennaro, G., Heise, J., Masetti, N., Muller, J. M., Nicastro, L., Orlandini, M., Palazzi, E., Pian, E., Piro, L., Soffitta, P., Stornelli, M., in 't Zand, J. J. M., Frail, D. A., Kulkarni, S. R., & Vietri, M.  
*Prompt and afterglow emission from the X-ray rich GRB981226 observed with BeppoSAX*  
2000, *ApJ*, 540, 697-703.
106. Brogan, C. L., Frail, D. A., Goss, W. M., & Troland, T. H.  
*OH Zeeman Magnetic Field Detections Toward Five Supernova Remnants Using the VLA*  
2000, *ApJ*, 537, 875-890.
105. Kulkarni, S. R., Berger, E., Bloom, J. S., Chaffee, F., Diercks, A., Djorgovski, S. G., Frail, D. A., Galama, T. J., Goodrich, R. W., Harrison, F. A., Sari, R., & Yost, S. A.

*The Afterglows of Gamma-ray Bursts 2000, in "Gamma-ray Bursts, 5th Huntsville Symposium"*  
eds. R. M. Kippen, R. S. Mallozzi, G. J. Fishman.  
(AIP: New York), pp. 277-xxx.

104. Frail, D. A., Kulkarni, S. R., Wieringa, M.H., Taylor, G.B., Moriarty-Schieven, G. H., Shepherd, D. S., Wark, R. M., Subrahmanyam, R., McConnell, D., & Cunningham, S. J. A Coordinated Radio Afterglow Program 2000, in "Gamma-ray Bursts, 5th Huntsville Symposium" eds. R. M. Kippen, R. S. Mallozzi, G. J. Fishman.  
(AIP: New York), pp. 298-xxx.
103. Frail, D. A., Waxman, E., & Kulkarni, S. R.  
*A 450 Day Light Curve of the Radio Afterglow of GRB 970508: Fireball Calorimetry 2000, ApJ, 537, 191-204.*
102. Taylor, G. B., Bloom, J. S., Frail, D. A., Kulkarni, S. R., Djorgovski, S. G. & Jacoby, B. A.  
*The Rapidly Fading Afterglow from the Gamma-Ray Burst of 1999 May 6 2000, ApJ(Let), 537, L17-L21.*
101. Hurley, K., Cline, T., Mazets, E., Aptekar, R., Golenetskii, S., Frederiks, D., Frail, D. A., Kulkarni, S., Trombka, J., McClanahan, T., Starr, R., & Goldsten, J.  
*Interplanetary Network Localization of GRB 991208 and the Discovery of its Afterglow 2000, ApJ(Let), 534, L23-L25.*
100. Frail, D. A., Kulkarni, S. R., Taylor, G. B., Shepherd, D. S., Bloom, J. S., Young, C. H., Nicastro, L., & Masetti, N.  
*The Radio Afterglow From GRB980519: A Test of the Jet and Circumstellar Models 1999, ApJ, 534, 559-564.*
99. Frail, D. A., Kulkarni, S. R., Bloom, J. S., Djorgovski, S. G., Gorjian, V., Gal, R. R., Meltzer, J., Sari, R., Chaffee, F. H., Goodrich, R., Frontera, F. & Costa, E.  
*The Radio Afterglow and the Host Galaxy of the X-Ray Rich GRB 981226 1999, ApJ(Let), 525, L81-L84.*
98. Schaefer, B. E., Snyder, J. A., Hernandez, J., Roscherr, B., Deng, M., Ellman, N., Baily, C., Rengstorf, A., Smith, D., Levine, A. Barthelmy, S. Butterworth, P. Hurley, K., Cline, T., Meegan, C., Kouveliotou, C., Kippen, R. M., Park, H. -, Williams, G. G., Porrata, R., Bionta, R., Hartmann, D., Band, D., Frail, D., Kulkarni, S., Bloom, J., Djorgovski, S., Sadava, D., Chaffee, F., Harris, F. Abad, C., Adams, B., Andrews, P., Baltay, C., Bongiovanni, A., Briceno, C., Bruzual, G., Coppi, P., della Prugna, F., Dubuc, A., Emmet, W., Ferrin, I., Fuenmayor, F., Gebhard, M., Herrera, D., Honeycutt, K., Magris, G., Mateu, J., Muffson, S., Musser, J., Naranjo, O., Oemler, A., Pacheco, R., Paredes, G., Rengel, M., Romero, L., Rosenzweig, P., Sabbey, C., S´anchez, G., S´anchez, G., Schenner, H., Shin, J., Sinnott, J., Sofia, S., Stock, J., Suarez, J., Tell´eria, D., Vicente, B., Vieira, K., & Vivas, K.  
*Discovery of the Optical Transient of GRB 990308 1999, ApJ(Let), 524, L103-L106.*
97. Harrison, F. A., Bloom, J. S., Frail, D. A., Sari, R., Kulkarni, S. R., Djorgovski, S. G., Axelrod, T., Mould, J., Schmidt, B. P., Wieringa, M. H., Wark, R. M., Subrahmanyam, R., McConnell, D., McCarthy, P. J., Schaefer, B. E., McMahan, R. G., Markze, R. O., Firth, E., Soffitta, P., & Amati, L.  
*Optical and Radio Observations of the Afterglow from GRB990510: Evidence for a Jet 1999, ApJ(Let), 523, L121-L124.*

*SN1998bw: The Case for a Relativistic Shock*  
1999, *A&A Supp.*, 138, 467-468.

95. Bloom, J. S., Kulkarni, S. R., Djorgovski, S. G., Eichelberger, A. C., Cote, P., Blakeslee, J.P., Odewahn, S. C., Harrison, F. A., Frail, D. A., Filippenko, A. V., Leonard, D. C., Riess, A. G., Spinrad, H., Stern, D., Bunker, A., Dey, A., Stanford, S. A., Grossan, B., Perlmutter, S., Knop, R. A., Hook, I. M., & Feroci, M.  
*The Unusual Afterglow of GRB 980326: Evidence for the Gamma-Ray Burst/Supernova Connection*  
1999, *Nature*, 401, 453-456.
94. Yusef-Zadeh, F., Goss, W. M., Roberts, D. A., Robinson, B. and Frail, D. A.  
*Three New Supernova Remnant OH Masers Near the Galactic Center: Evidence for Large-Scale Maser Emission from Supernova Remnants*  
1999, *ApJ*, 527, 172-179.
93. Claussen, M. J., Goss, W. M., Frail, D. A., & Desai, K.  
*The Sizes of 1720 MHz OH Masers: VLBA and MERLIN Observations of the Super-nova Remnants W44 and W28*  
1999, *ApJ*, 522, 349-356.
92. Bock, D. C.-J., Frail, D. A., Sault, R. J., Green, A. J. & Milne, D. K.  
*New Observations of the Vela X Region,*  
1998, *Mem.S.A.It.*, 64, 819-925.
91. Gaensler, B. M., Stappers, B. W., Frail, D. A., & Johnston, S.  
*A Search For Pulsar Wind Nebulae Using Pulsar Gating,*  
1998, *Mem.S.A.It.*, 64, 813-818.
90. Claussen, M. J., Goss, W. M., Frail, D. A., & Seta, M.  
*No Water Masers Associated with Supernova Remnants,*  
1999, *AJ*, 117, 1387-1391.
89. Kulkarni, S. R., Frail, D. A., Sari, R., Moriarty-Schieven, G. H., Shepherd, D. S., Udomprasert, P., Readhead, A. C. R., Bloom, J. S. & Feroci, M.  
*Discovery of a radio flare from GRB 990123*  
1999, *ApJ(Let)*, 522, L97-L100.
88. Bloom, J. S., Odewahn, S. C., Djorgovski, S. G., Kulkarni, S. R., Harrison, F. A., Koresko, C. D., Neugebauer, G., Armus, L., Frail, D. A., Gal, R. R., Sari, R., Squires, G., Illingworth, G., Kelson, D., Chaffee, F., Goodrich, R., Feroci, M., Costa, E., Piro, L., Frontera, F., Mao, S., Akerlof, C & McKay, T. A.  
*The Host Galaxy of GRB 990123*  
1999, *ApJ.(Let)*, 518, L1-L4.
87. Kulkarni, S. R., Djorgovski, S. G., Odewahn, S. C., Bloom, J. S., Gal, R. R., Koresko, C. D., Harrison, F. A., Lubin, L. M., Armus, L., Sari, R., Illingworth, G. D., Kelson, D. D., Magee, D. K., van Dokkum, P. G., Frail, D. A., Mulchaey, J. S., Malkan, M. A., McLean, I. S., Teplitz, H. I., Koerner, D., Kirkpatrick, D., Kobayashi, N., Yadigaroglu, I. -A., Halpern, J., Piran, T., Goodrich, R., Chaffee, F., Feroci, M. & Costa, E.  
*The afterglow, the redshift, and the extreme energetics of the -ray burst 990123*  
1999, *Nature*, 398, 389-394.
86. Frail, D. A., Kulkarni, S. R. & Bloom, J. S.

*An outburst of relativistic particles from the soft -ray repeater 1900+14*  
1999, *Nature*, 398, 127-129.

85. Yusef-Zadeh, F., Roberts, D. A., Goss, W. M., Frail, D. A., & Green, A. J.  
*High resolution Observations of OH(1720 MHz) Masers Toward the Galactic Center*  
1999, *Ap.J.(Let)*, 512, 230-236.
84. Bloom, J. S., Frail, D. A., Kulkarni, S. R., Djorgovski, S. G., Halpern, J. P., Marzke, R. O., Patton, D.R., Oke, J.B., Horne, K.D., Gomer, R., Goodrich, R., Campbell, R., Moriarty-Schieven, G. H., Redman, R.O., Feldman, P.A., Costa, & E., Masetti, N.  
*The Discovery and Broad-band Follow-up of the Transient Afterglow of GRB 980703*  
1998, *Ap.J.(Let)*, 508, L21-L24.
83. Djorgovski, S. G., Kulkarni, S. R., Bloom, J. S., Goodrich, R., Frail, D. A., Piro, L. & Palazzi, E.  
*Spectroscopy of the Host Galaxy of the Gamma-Ray Burst 980703*  
1998, *Ap.J.(Let)*, 508, L17-L20.
82. Bloom, J. S., Djorgovski, S. G., Kulkarni, S. R., & Frail, D. A.  
*The Host Galaxy of GRB 970508.*  
1998, *Ap.J.(Let)*, 507, L25-L28.
81. Odewahn, S. C., Djorgovski, S. G., Kulkarni, S. R., Dickinson, M., Frail, D. A., Ramaprakash, A. N., Bloom, J. S., Adelberger, K. L., Halpern, J., Helfand, D. J., Bahcall, J., Goodrich, R., Frontera, F., Feroci, M., Piro, L. & Costa, E.  
*The Host Galaxy of the Gamma-Ray Burst 971214*  
1998, *Ap.J.(Let)*, 509, L5-L8.
80. Bloom, J. S., Kulkarni, S.R., Harrison, F., Prince, T., Phinney, E.S., & Frail, D. A.  
*Expected characteristics of the subclass of Supernova Gamma-ray Bursts (S-GRBs)*  
1998, *Ap.J.(Let)*, 506, L105-L108.
79. Frail, D. A., & Mitchell, G. F.  
*OH(1720 MHz) Masers As Signposts of Molecular Shocks*  
1998, *Ap.J.*, 508, 690-695.
78. Kulkarni, S. R., Frail, D. A., Wieringa, M. H., Ekers, R. D., Sadler, E. M., Wark, R. M., Higdon, J. L., Phinney, E. S., & Bloom, J. S.  
*The gamma-ray burst of 980425 and its association with the extraordinary radio emission from a most unusual supernova.*  
1998, *Nature*, 395, 663-669.
77. Koralesky, B, Frail, D. A., Goss, W. M., Claussen, M. J., & Green, A. J.  
*Shock-Excited Maser Emission from Supernova Remnants: G32.8-0.1, G337.8-0.1, G346.6-0.2, and the HB3/W3 Complex*  
1998, *AJ*, 116, 1323-1331.
76. Taylor, G.B., Frail, D.A., Kulkarni, S.R., Shepherd, D.S., Feroci, M., & Frontera, F.  
*The Discovery of the Radio Afterglow from the Optically Dim Gamma-Ray Burst of 1998 March 29*  
1998, *Ap.J.(Let)*, 502, L115-L118.
75. Frail, D. A., Kulkarni, S. R., Shepherd, D. S. Waxman, E., Costa, E., Frontera, F., Heise, J., & Piro, L.  
*No Radio Afterglow from the Gamma-Ray Burst of February 28, 1997*  
1998, *Ap.J.(Let)*, 502, L110-L112.

74. Kouveliotou, C., Dieters, S., Strohmayer, T., van Paradijs, J., Fishman, G. J., Meegan, C. A., Hurley, K., Kommers, J., Smith, I., Frail, D., & Murakami, T.  
*An X-ray pulsar with a superstrong magnetic field in the soft gamma-ray repeater SGR 1806-20.*  
1998, *Nature*, 393, 235-237.
73. Ramaprakash, A. N., Kulkarni, S. R., Frail, D. A., Koresko, C., Kuchner, M., Goodrich, R., Neugebauer, G., Murphy, T., Eikenberry, S., Bloom, J. S., Djorgovski, S. G., Waxman, E., Frontera, F., Feroci, M., & Nicastro, L.  
*The energetic afterglow of the gamma-ray burst of 14 December 1997.*  
1998, *Nature*, 393, 43-46.
72. Kulkarni, S. R., Djorgovski, S. G., Ramaprakash, A. N., Goodrich, R., Bloom, J. S., Adelberger, K. L., Kundic, T., Lubin, L., Frail, D. A., Frontera, F., Feroci, M., Nicastro, L., Barth, A. J., Davis, M., Filippenko, A. V. & Newman, J.  
*Identification of a host galaxy at redshift  $z = 3.42$  for the gamma-ray burst of 14 December 1997*  
1998, *Nature*, 393, 35-39.
71. Gaensler, B. M., Stappers, B. W., Frail, D. A., & Johnston, S.  
*An Unusual Pulsar Wind Nebula Associated with PSR B0906-49*  
1998, *Ap.J.(Let)*, 499, L69-L73.
70. Frail, D. A.  
*Radio Pulsar Wind Nebulae*  
1998, in "Neutron Stars and Pulsars - thirty years after the discovery"  
eds. N. Shibasaki, N. Kawai, S. Shibata, and T. Kifune  
(Universal Academy Press: Tokyo), pp. 423-430. (Invited Review).
69. Shepherd, D. S., Frail, D. A., Kulkarni, S. R., & Metzger, M. R.  
*Owens Valley Interferometric Observations of the Gamma Ray Bursts 970228 and 970508*  
1998, *Ap.J.*, 497, 859-864.
68. Frail, D. A.  
*The Radio Counterparts of Gamma Ray Bursters*  
1998, in "Fourth Huntsville Gamma Ray Burst Symposium"  
eds. C. Meegan, R. Preece, and T. Koshut  
(AIP: New York), pp. 563-570. (Invited Review).
67. Frayer, D. T., Seaquist, E. R., & Frail, D. A.  
*OH Satellite Line Masers in the Nucleus of NGC253*  
1997, *A.J.*, 115, 559-572.
66. Jones, T. W., Rudnick, L., Jun, B., -I., Borkowski, K. J., Dubner, G., Frail, D. A., Kang, H., Kassim, N. E., & McCray, R.  
*1051 Ergs: The Evolution of Shell Supernova Remnants*  
1998, *PASP*, 110, 125-151.
65. Waxman, E., Kulkarni, S. R., & Frail, D. A.  
*Implications of the Radio Afterglow from the Gamma-Ray Burst of May 8, 1997*  
1997, *Ap.J.* 497, 288-293.
64. Li, P., Hurley, K., Vrba, F., Kouveliotou, C., Meegan, C., Fishman, G., Kulkarni, S. R., & Frail, D.



*ROSAT X-Ray Observation of the Second Error Box for SGR 1900+14*  
1997, *Ap.J.(Let)*, 490, L823-L825.

63. Taylor, G. B., Frail, D. A., Beasley, A. J., & Kulkarni, S. R.  
*Position and parallax of the gamma-ray burst of 8 May 1997*  
1997, *Nature*, 389, 263-265.
62. Frail, D. A., Kulkarni, S. R., Nicastro, L., Feroci, M., and Taylor, G. B.  
*The Radio Afterglow from the -ray burst of 8 May 1997*  
1997, *Nature*, 389, 261-263.
61. Seaquist, E. R., Frayer, D. T., and Frail, D. A.  
*OH Satellite Line Masers and an AGN Candidate in M82*  
1997, *Ap.J.(Let)*, 487, L131-L134.
60. Metzger, M. R., Djorgovski, S. G., Kulkarni, S. R., Steidel, C. C., Adelberger, K. L.,  
Frail, D. A., Costa, E., and Frontera, F.  
*Spectral constraints on the redshift of the optical counterpart to the gamma-ray burst of 8 May 1997*  
1997, *Nature*, 387, 879-880.
59. Djorgovski, S. G., Metzger, M. R., Kulkarni, S. R., Odewahn, S. C., Gal, R. R., Pahre,  
M., Frail, D. A., Feroci, M., Costa, E., and Palazzi, E.  
*The optical counterpart to the gamma-ray burst GRB 970508*  
1997, *Nature*, 387, 876-878.
58. Sarma, A. P., Goss, W. M., Green, A. J., and Frail, D. A.  
*Australia Telescope Observations of the CTB 33 Complex*  
1997, *Ap.J.*, 483, 335-339.
57. Green, A. J., Frail, D. A., Goss, W. M. and Otrupcek, R.  
*Continuation of a Survey of OH(1720 MHz) Maser Emission Towards Supernova Remnants*  
1997, *AJ.*, 114, 2058-2067.
56. Frail, D. A., Kulkarni, S. R., Costa, E., Frontera, F., Heise, J., Feroci, M., Piro, L., Dal Fiume, D.,  
Nicastro, L., Palazzi, E., and Jager, R.  
*Radio Monitoring of the 1997 January 11 Gamma-Ray Burst*  
1997, *Ap.J.(Let)*, 483, L91-L94.
55. Frail, D. A.  
*Young Neutron Stars in Supernova Remnants,*  
1997 in *NATO Advanced Study Institute: "The Many Faces of Neutron Stars"*, eds. A. Alpar, R.  
Buccheri, and J. van Paradijs (in press)  
(Invited Review).
54. Bietenholz, M. F., Kassim, N. E., Frail, D. A., Perley, R. A., Erickson, W. C. and Hajian, A. R.  
*The Radio Spectral Index of the Crab Nebula,*  
1997, *Ap.J.*, 490, 291-301.
53. Claussen, M. J., Frail, D. A., Goss, W. M. and Gaume, R. A.  
*Polarization Observations of 1720 MHz OH Masers toward the Three Supernova Remnants W28,  
W44, and IC443*  
1997, *Ap.J.*, 489, 143-159.

52. Frail, D. A., Vasisht, G. and Kulkarni, S. R.  
*The Changing Structure of the Radio Nebula Around the Soft Gamma-Ray Repeater 1806–20*  
1997, *Ap.J.(Let)*, 480, L129-L132.
51. Frail, D. A. and Scharringhausen, B. R.  
*A Radio Survey for Pulsar Wind Nebulae*  
1997, *Ap.J.*, 480, 364-370.
50. Frail, D. A. Bietenholz, M. F., Markwardt, C. B. and Ogelman, H.  
*A Radio/X-Ray Comparison of the Vela X Region*  
1997, *Ap.J.*, 475, 224-230.
49. Giacani, E. B., Dubner, G. M., Kassim, N. E., Frail, D. A., Goss, W. M., Winkler, P. F. and Williams, B. F.  
*A New Radio and Optical Study of the Supernova Remnant W44*  
1997, *AJ*, 113, 1379-1390.
48. Kassim, N. E. and Frail, D. A.  
*A New Supernova Remnant Over the Galactic Centre*  
1996, *MNRAS*, 283, L51-L57.
47. Yusef-Zadeh, F., Robinson, B. T., Roberts, D. A., Goss, W. M., Frail, D. A. and Green, A. J.  
*The 1720 MHz OH Emission From G359.1–0.5 and the CND,*  
1996 in *The Galactic Center: Proceedings of the Fourth ESO/CTIO Workshop*  
ed. R. Gredel (San Francisco: ASP), pp. 151-162.
46. Green, A. J., Frail, D. A., Goss, W. M., Yusef-Zadeh, F. and Roberts, D. A.  
*Detection of OH(1720 MHz) Masers in Sgr A East*  
1996 in *The Galactic Center: Proceedings of the Fourth ESO/CTIO Workshop*  
ed. R. Gredel (San Francisco: ASP), pp. 93-99.
45. Yusef-Zadeh, F., Roberts, D. A., Goss, W. M., Frail, D. A. and Green, A. J.  
*Detection of 1720 MHz OH Masers at the Galactic Center: Evidence for Shock-Excited Gas and Milli-Gauss Fields*  
1996, *Ap.J.(Let)*, 466, L25-L29.
44. Hurley et al.  
*A Possible X-Ray Counterpart to SGR1900+14*  
1996, *Ap.J.(Let)*, 463, L13-L16.
43. Frail, D. A., Giacani, E. B., Goss, W. M., and Dubner, G.  
*The Pulsar Wind Nebula Around PSRB1853+01 in the Supernova Remnant W44*  
1996, *Ap.J.(Let)*, 464, L165-L168.
42. Hurley, K., Li, P., Kulkarni, S. R., van Kerkwijk, M., Frail, D. A., Kouveliotou, C., Meegan, C., Fishman, G., Smith, I., Hartmann, D. and Vrba, F.  
*A Possible IR/X-ray Counterpart to the SGR1900+14*  
1996, in *High Velocity Neutron Stars and Gamma Ray-Bursts Workshop,*  
eds. R. E. Rothschild and R. E. Lingenfelter (New York: AIP), pp. 74-78.
41. Frail, D. A.  
*Observational Evidence for High Velocities Pulsars in our Galaxy* 1996 in *High Velocity Neutron Stars and Gamma Ray-Bursts Workshop,*  
eds. R. E. Rothschild and R. E. Lingenfelter (New York: AIP), pp. 3-10.

(Invited Review).

40. Philp, C. J., Evans, C. R., Leonard, P. J. T., and Frail, D. A.  
*Do OB Runaway Stars Have Pulsar Companions?*  
1996, *AJ*, 111, 1220-1226.
39. Frail, D. A., Goss, W. M., Reynoso, E., Giacani, E., Green, A. J. and Otrupcek, R.,  
*A Survey for OH(1720 MHz) Maser Emission Toward Supernova Remnants*  
1996, *AJ*, 111, 1651-1659.
38. Navarro, J., De Bruyn, G., Frail, D. A., Kulkarni, S. R. and Lyne, A. G.  
*A Very Luminous Binary Millisecond Pulsar*  
1995 *Ap.J.(Let)*, 455, L55-L58.
37. Frail, D. A., Kassim, N. E., Cornwell, T. J. and Goss, W. M.  
*Does the Crab Have a Shell?*  
1995 *Ap.J.(Let)*, 454, L129-L132.
36. Frail, D. A. and Kulkarni, S. R.  
*Radio Counterpart Searches of Gamma Ray Bursts*  
1995 *Astro. Sp. Sci.*, 231, 277-280.
35. Frail, D. A.  
*Pulsar/Supernova Remnant Associations*  
1996 in *IAU Symposium 165, Compact Stars in Binaries*  
eds. J. van Paradijs, E. P. J. van den Heuvel, and E. Kuulkers (Kluwer: Dordrecht), pp. 257-262.
34. Goss, W. M., Frail, D. A., and Whiteoak, J. B. Z.  
*New Pulsar/Supernova Remnant Associations*  
1995, *J. Astrophys. Astr.*, 16, 89-95.
33. J. M. Weisberg, M. H. Siegel, Frail, D. A., and Johnston, S.  
*Neutral Hydrogen Absorption Measurements of Four Distant Pulsars and the Electron Density in the Inner Galaxy*  
1995, *Ap.J.*, 447, 204-210.
32. Harrison et al.  
*Preliminary Results from the Ground-Based BATSE/COMPTEL/NMSU Rapid Response Network for GRB940301*  
1995, *Astron. & Astrophys.*, 297, 465-469.
31. Vasisht, G., Frail, D. A., and Kulkarni, S. R.  
*Radio Monitoring and High Resolution Imaging of the Soft Gamma Ray Repeater SGR1806-20*  
1995 *Ap.J.(Let)*, 440, L65-L68.
30. Philp, C., Frail, D. A., Evans, C. R. and Leonard, P. J. T.  
*A Search for Pulsar Companions to Runaway OB Stars*  
1994, in *The Evolution of X-Ray Binaries*,  
eds. S. S. Holt and C. S. Day (New York: AIP), pp. 299-302.
29. Frail, D. A., Kulkarni, S. R., Hurley, K. C., Fishman, G. J., Kouveliotou, C., Meegan, C. A., Sommer, M., Boer, M., Niel, M., and Cline, T.  
*A Search for the Radio Counterpart to the March 1, 1994 Gamma Ray Burst*

1994 *Ap.J.(Let)*, 437, L43-L46.

28. Frail, D. A., Goss, W. M., and Whiteoak, J. B. Z.  
*The Radio Lifetime of Supernova Remnants and the Distribution of Pulsar Velocities at Birth*  
1994 *Ap.J.* 437, 781-793.
27. Vasisht, G., Kulkarni, S. R., Frail, D. A. and Greiner, J.  
*Supernova Remnant Candidates for the Soft -Ray Repeater 1900+14*  
1994 *Astrophys. J. (Letters)*, 431, L35-L38.
26. Frail, D. A., Weisberg, J. M., Cordes, J. M., and Mathers, C.  
*Probing the Interstellar Medium With Pulsars on AU Scales*  
1994 *Ap. J.*, 436, 144-151.
25. Frail, D. A., and Beasley, A. J.  
*Stellar OH Masers Towards Globular Clusters*  
1994 *Astron. & Astrophys.*, 290, 796-802.
24. Frail, D. A., Diamond, P. J., Cordes, J. M, and Van Langevelde, H. J.  
*Anisotropic Scattering of OH/IR Stars Toward the Galactic Center*  
1994 *Ap. J. (Letters)*, 427, L43-L46.
23. Frail, D. A., Kassim, N. E., and Weiler, K. W.  
*Radio Imaging of Two Supernova Remnants Containing Pulsars*  
1994, *A. J.*, 107, 1120-1127.
22. Kulkarni, S. R., Frail, D. A., Kassim, N. E., Murakami, T., and Vasisht, G.  
*The Radio Nebula of the Soft Gamma-Ray Repeater SGR1805–20*  
1994 *Nature*, 368, 129-131.
21. Frail, D. A., Goss, W. M., and Slysh, V. I.  
*Shock Excited Maser Emission from the Supernova Remnant W28*  
1994 *Ap. J. (Letters)*, 424, 111-113.
20. Frail, D. A., Kulkarni, S. R., and Vasisht, G.  
*Identification of PSR1758–23 as a Runaway Pulsar from the Supernova Remnant W28*  
1993 *Nature*, 365, 136-138.
19. Kulkarni, S. R. & Frail, D. A.  
*Identification of a Supernova Remnant Coincident with the Soft Gamma-Ray Repeater SGR1806–20*  
1993 *Nature*, 365, 33-35.
18. Frail, D. A. and Moffett, D. A.  
*Deep VLA Imaging of Pulsar Powered Nebulae and the Beaming Fraction of Young Pulsars*  
1993 *Ap. J.*, 408, 637-645.
17. Wolszczan, A. and Frail, D. A.  
*A Planetary System Around the Millisecond Pulsar PSR1257+12*  
1992 *Nature*, 355, 145-147.
16. Van Langevelde, H. J., Frail, D. A., Cordes, J. M., and Diamond, P. J.  
*Interstellar Scattering Towards the Galactic Center as Probed by OH/IR Stars*  
1997 *Ap. J.* 306 686-695

15. Zhao, J. H., Roberts, D. A., Goss, W. M., Frail, D. A., Lo, K. Y., Subrahmanyan, R., Kesteven, M. J., Ekers, R. D., Allen, D. A., Burton, M. G., Spyromilio, J.  
*A Transient Radio Source near the Center of the Milky Way Galaxy*  
*1992 Science*, 255, 1538-1543.
14. Wietfeldt, R. D. and Frail, D. A.  
*Burst Mode VLBI and Pulsar Applications in Radio Interferometry – Theory, Techniques and Applications*  
*1991 IAU Coll. #131, eds T. J. Cornwell and R. A. Perley (San Francisco: Astronomical Society of the Pacific)*, pp. 76-80.
13. Frail, D. A., Cordes, J. M., Hankins, T. H., and Weisberg, J. M.  
*HI Absorption Measurements Toward 15 Pulsars and the Radial Distribution of Diffuse Ionized Gas in the Galaxy*  
*1991 Ap. J.*, 382, 168-181.
12. Cordes, J. M., Weisberg, J. M., Frail, D. A., Spangler, S. R., Ryan, M.  
*The Galactic Distribution of Free Electrons*  
*1991 Nature*, 354, 121-124.
11. Frail, D. A. and Kulkarni, S. R.  
*Unusual Interaction of the High-Velocity Pulsar PSR1757–24 with the Supernova Remnant G5.4–1.2*  
*1991 Nature*, 352, 785-787.
10. Bietenholz, M. F., Frail, D. A. and Hankins, T. H.  
*Does the Vela Pulsar have “Wisps”?*  
*1991, Ap. J.(Let)*, 376, L41-L44.
9. Frail, D. A. and Hjellming, R. M.  
*Distance and Total Column Density to the Periodic Radio Star LSI+61\_303*  
*1991, A. J.*, 101, 2126-2130.
8. Frail, D. A. and Weisberg, J. M.  
*A Critical Evaluation of Pulsar Distance Measurements*  
*1990, A. J.*, 100, 743-757.
7. Lyne, A. G., Manchester, R. N., D’Amico, N., Staveley-Smith, L., Johnston, S., Lim, J., Fruchter, A. S., Goss, W. M., and Frail, D. A.  
*An Eclipsing Millisecond Pulsar in the Globular Cluster Terzan 5*  
*1990 Nature*, 347, 650-652.
6. Seaquist, E.R., Bode, M.F., Frail, D. A., Roberts, J.A., Evans, E., & Albinson, J.S.  
*A Detailed study of the Remnant of Nova GKPersei and its Environs*  
*1989 Ap. J.*, 344, 805-825.
5. Frail, D. A. and Clifton, T. R.  
*A Kinematic Distance Estimate to the Supernova Remnant G33.6+0.1*  
*1989 Ap. J.*, 336, 854-860.
4. Clifton, T. R., Frail, D. A., Kulkarni, S. R., and Weisberg, J. M.

*Independent Distance Estimates of Highly Dispersed Pulsars Obtained Through Neutral Hydrogen Absorption in The Physics of Compact Objects : Theory vs Observations 1988 Adv. Space Res., 8, (2)351-(2)352.*

3. Clifton, T. R., Frail, D. A., Kulkarni, S. R., and Weisberg, J. M.  
*Neutral Hydrogen Absorption Observations Toward High Dispersion Measure Pulsars 1988 Ap. J., 333, 332-340.*
2. Bode, M. F., Seaquist, E. R., Frail, D. A., Roberts, J. A., Whittet, D. C. B., Evans, E., and Albinson, J.S.  
*An Ancient Planetary Nebula Surrounding the Old Nova GKPersei 1987 Nature, 329, 519-521.*
1. Frail, D. A., Seaquist, E. R., and Taylor, A. R.  
*Extended Emission Around the Variable Radio Star LSI+61\_303 1987 A. J., 93, 1506-1510.*

#### **Ten Well Known Papers:**

129. D. A. Frail, S. R. Kulkarni, R. Sari, S. G. Djorgovski, J. S. Bloom, T. J. Galama, D. E. Reichart, E. Berger, F. A. Harrison, P. A. Price, S. A. Yost, A. Diercks, R. W. Goodrich, F. Chaffee  
***Beaming in Gamma-Ray Bursts: Evidence for a Standard Energy Reservoir 2001, ApJ, 562, L55-L58.***
62. Frail, D. A., Kulkarni, S. R., Nicastro, L., Feroci, M., and Taylor, G. B.  
***The Radio Afterglow from the -ray burst of 8 May 1997 1997, Nature, 389, 261-263.***
230. Frail, D. A., Kulkarni, S. R., Ofek, E. O., Bower, G. C. and Nakar, E.  
***A Revised View of the Transient Radio Sky 2012, ApJ, 747, 70-82.***
186. Fox, D. B., Frail, D. A., Price, P. A., et al.  
***The afterglow of GRB 050709 and the nature of the short-hard -ray bursts 2005, Nature, 437, 845-850.***
78. Kulkarni, S. R., Frail, D. A., Wieringa, M. H., Ekers, R. D., Sadler, E. M., Wark, R. M., Higdon, J. L., Phinney, E. S., & Bloom, J. S.  
***The gamma-ray burst of 980425 and its association with the extraordinary radio emission from a most unusual supernova. 1998, Nature, 395, 663-669.***

60. Metzger, M. R., Djorgovski, S. G., Kulkarni, S. R., Steidel, C. C., Adelberger, K. L., Frail, D. A., Costa, E., and Frontera, F.  
*Spectral constraints on the redshift of the optical counterpart to the gamma-ray burst of 8 May 1997*  
*1997, Nature, 387, 879-880.*
17. Wolszczan, A. and Frail, D. A.  
*A Planetary System Around the Millisecond Pulsar PSR1257+12*  
*1992 Nature, 355, 145-147.*
19. Kulkarni, S. R. & Frail, D. A.  
*Identification of a Supernova Remnant Coincident with the Soft Gamma-Ray Repeater SGR1806-20*  
*1993 Nature, 365, 33-35.*
21. Frail, D. A., Goss, W. M., and Slysh, V. I.  
*Shock Excited Maser Emission from the Supernova Remnant W28*  
*1994 Ap. J. (Letters), 424, 111-113.*
26. Frail, D. A., Weisberg, J. M., Cordes, J. M., and Mathers, C.  
*Probing the Interstellar Medium With Pulsars on AU Scales*  
*1994 Ap. J., 436, 144-151.*