CURRICULUM VITAE

Assaf Horesh *August 2016*

CONTACT INFORMATION

Weizmann Institute of Science,
Department of Particle Physics & Astrophysics
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RESEARCH INTERESTS

Radio Astronomy; Supernovae, Gamma-Ray Bursts, exotic relativistic transients, and EM counterparts of gravitational wave sources; Young Active Galactic Nuclei (AGNs) and radio-quiet AGNs; Particle acceleration mechanisms in extreme environments; Large structure formation - strong lensing in galaxy clusters.

EDUCATION

Tel Aviv University, Tel Aviv, Israel
Ph.D. in Physics, 2010, Advisor: Dan Maoz
M.Sc. in Physics, Magna Cum Laude, 2005, Advisor: Dan Maoz
B.Sc. in Physics 2002

EMPLOYMENT AND ACTIVITIES

The Hebrew University of Jerusalem
Senior Lecturer, *Starting October 2016*

Weizmann Institute of Science
Postdoctoral Scholar in astrophysics, *November 2013 – Current*

California Institute of Technology (Caltech)
Postdoctoral Scholar in astrophysics, *November 2010 – October 2013*

Tel-Aviv University
Teaching Assistant, *2003 – October 2010*

Tel-Aviv University
Youth University Instructor, *2003 – 2005*

Holon Institute of Technology
Teaching Assistant, *2002 – 2003*

Israel Defense Force (IDF)
Military Service (Infantry and Operations Officer, Rank: Lieutenant), *1994 – 1999*

SCHOLARSHIPS HONORS AND AWARDS

Cosmology Postdoctoral Fellowship (declined), awarded by the Lawrence Berkeley National Laboratory (LBNL), 2010

Dan David Prize Scholarship, awarded by the Dan David Foundation, Sept. 2009

Dean's Commendation for Public Outreach Activity, awarded by Tel Aviv University, 2005

School of Physics and Astronomy award for outstanding achievements, awarded by Tel

Aviv University, 2004

M.Sc Magna Cum Laude, Tel-Aviv University 2005

CONFERENCE PARTICIPATION

"GROWTH conference", Caltech, USA, July 2016.

"Boutiques & Experiments 2016 Radio Astronomy", Caltech, USA, July 2016 (Invited workshop).

"European Week of Astronomy", Greece, July, 2016 (Talk).

"Big Data in Astronomy workshop", TAU, Israel, December 2015.

"New Frontiers in Radio Astronomy workshop", Weizmann Institute, Israel, December 2015 (Lead science committee organizer)

"Tidal Disruption Events workshop", Jerusalem, Israel, November 2015 (Talk)

"The Transient Universe", Oxford, UK, September 2015 (Invited workshop)

"Synoptic Surveys: Boutique & Experiments", Caltech, USA, 2015 (Invited workshop)

"MESA summer school", UCSB, USA, 2015

"Fireworks 2015: New and emerging classes of Transients", Liverpool JM University, UK, 2015

"The iPTF summer school", Caltech, USA, 2014 (Invited Talk)

"Supernovae in the Local Universe: 10,000 Days of Supernova 1987A", CAASTRO, Australia, 2014 (poster)

"220 American Astronomical Society Meeting", Washington DC, USA, 2014 (Talk)

"CARMA Science symposium", University of Chicago, USA, 2013 (Talk)

"Radio Astronomy in the LSST Era", NRAO, Charlottesville, USA, 2013 (Talk)

"Cluster Lensing: Peering into the Past", STSCI, USA, 2013 (Invited Talk)

"Fireworks meeting", Oxford, UK, 2012 (Talk)

"The Physics of Astronomical Transients", Aspen, USA, 2012 (Talk)

"219 American Astronomical Society Meeting", Austin, USA, 2012 (Talk+Poster)

"NRAO reduction workshop", NRAO, Socorro, USA, 2011

"CARMA summer school", CARMA observatory, USA, 2011

"Fireworks meeting", Caltech, USA, 2011

"CARMA Science symposium", University of California Berkeley, USA, 2011

"Statistical Inference from Astrophysical Data Max Planck school", Heidelberg, Germany, 2009

"CosmoClusters workshop", Marseille, France, 2009(Talk)

"Supernova Rates 2008", Florence, Italy, 2008 (Talk)

"Searching For Strong Lenses in Large Imaging Surveys", Fermilab, USA, 2007 (Talk)

"Active Galactic Nuclei: From Atoms to Black Holes", Tel-Aviv University, Israel, 2006

"IPS Annual Meeting" , Jerusalem, Israel, 2006

"IPS Annual Meeting", Karmiel, Israel, 2005 (Talk)

"The Origin of Galaxies winter school", Jerusalem, Israel, 2004

"Galaxy Formation workshop", Jerusalem, Israel, 2003

Selected Colloquia and Seminars

"The Era of Time Domain Radio Astronomy", NYU, USA, April 2016

"The Era of Time Domain Radio Astronomy", Columbia, USA, April 2016

"The Era of Time Domain Radio Astronomy", NMNH, USA, April 2016

"The Era of Time Domain Radio Astronomy", Oxford, UK, April 2015

"The Era of Time Domain Radio Astronomy", Southampton, UK, April 2015

"The Era of Time Domain Radio Astronomy", European Southern Observatory (ESO) HQ, Germany, Feb 2015 (Invited Talk)

"The Era of Time Domain Radio Astronomy", ASTRON, Holland, Jan 2015

"The Era of Time Domain Radio Astronomy", University of Amsterdam, Holland, Jan 2015 (Colloquium)

"The Era of Time Domain Radio Astronomy", Radboud University, Holland, Jan 2015 (Invited Colloquium)

"Exploring the Dynamic Radio Sky", ITC, Harvard, April 2014 (Invited Talk)

"Exploring the Dynamic Radio Sky", Princeton University, April 2014

"Exploring the Dynamic Radio Sky", Tel-Aviv University, April 2013

"Exploring the Dynamic Radio Sky", Weizmann Institute, April 2013

"Exploring the Dynamic Radio Sky", Technion, April 2013

"Exploring the Dynamic Radio Sky", Carnegie Observatories, April 2012

"New Results for The Lensed Arc Statistics in Galaxy Clusters", Tel-Aviv University, June 2010

"New Results for Giant Arc Statistics in $\sim$ 100 Clusters Observed with HST", University of California Berkeley, October 2009

"New Results for Giant Arc Statistics in $\sim$ 100 Clusters Observed with HST", Caltech, October 2009

"New Results for Giant Arc Statistics in $\sim$ 100 Clusters Observed with HST", ITC, Harvard, September 2009

"The Lensed Arc Production Efficiency of Galaxy Clusters", Max Planck Institute for Astronomy', Heidelberg, December 2006.

"Statistics of Lensed Arcs in Clusters Theory versus Observations", Tel-Aviv University May 2004.

Scientific Community Service (selected):

Referee for the *Monthly Notices of the Royal Astronomical Society (MNRAS)* and for *The Astrophysical Journal (ApJ)*

Lead Member of the "New Frontiers in Radio Astronomy" workshop SOC (Weizmann Institute, 2015)

Member of "ThunderKAT: A MeerKAT Transient Key Science Project "

Member of the "Very Large Array Sky Survey (VLASS)" time-domain science working group

Member of Caltech Keck/Palomar Time Allocation Committee (TAC), 2013

Caltech Time Domain Forum Co-organizer

American Astronomical Society (AAS) Member 2011-2014

Organizer of the astrophysics student seminar - Tel Aviv University.

Founder and organizer of astro-ph club - Tel Aviv University.

Mentoring

Caltech
Kunal Mooley, Graduate Student

Tel-Aviv University
Or Graur, Graduate Student

Public Outreach

Lecturer at the CARMA observatory public open house event.

Volunteer at the "Transit of Venus" 2012 event in Owens Valley, CA, USA.

Co-organizer of the "Supernova of a generation" public event - Caltech

Co-organizer of the Tel-Aviv University astronomy club public lecture series.

Co-writer of the "Astropedia" - the online Hebrew encyclopedia of space science

"BASHAAR club for youth": giving public lectures in schools and high schools.

A member of the "Cosmic Diary" team - An IAU international year of astronomy (2009) public outreach project

Co-author of "Postcards from the Universe" - An IAU book for the international year of astronomy (2009)

Observing Experience

Two nights with the 8.2 m Subaru telescope at the Mauna Kea Observatory, Hawaii, USA

Over 10 nights with the 5 m Hale telescope at the Palomar Observatory, California, USA

Seven nights with the 4 m Mayall telescope at the Kitt Peak Observatory, Arizona, USA

Over 15 nights with the 10 m Keck telescope at the Mauna Kea Observatory, Hawaii, USA

Karl G. Jansky Very Large Array (VLA) - (under multiple programs on 2011 - current) The Combined Array for Research in Millimeter-Wave Astronomy (CARMA) (under multiple programs on 2011- current)

Doctoral Dissertation

"Probing Cosmic History: Galaxy Cluster Gravitational Lens Statistics and Supernova Rates", Supervisor: Prof. Dan Maoz (TAU).

Publications

Assaf Horesh - updated August 2016

1) "The Lensed Arc Production Efficiency of Galaxy Clusters: A Comparison of Matched Observed and Simulated Samples", **Horesh A.**, Ofek E. O., Maoz D., Bartelmann M., Meneghetti M., Rix H.-W., ApJ, 633, 768, (2005).

2) "The rate of Type Ia supernovae at z 0.2 from SDSS-I overlapping fields", **Horesh A.**, Poznanski D., Ofek E. O., Maoz D., MNRAS, 389, 1871, (2008).

3) "The lensing efficiencies of MACS X-ray-selected versus RCS optically selected galaxy clusters", **Horesh A.**, Maoz D., Ebeling H., Seidel G., Bartelmann M., MNRAS, 406, 1318, (2010).

4) "PTF1 J071912.13+485834.0: An Outbursting AM CVn System Discovered by a Synoptic Survey", Levitan D., Fulton B. J., Groot P. J., Kulkarni S. R., Ofek E. O., Prince T. A., Shporer A., Bloom J. S., Cenko S. B., Kasliwal M. M., Law N. M., Nugent P. E., Poznanski D., Quimby R. M., **Horesh A.**, Sesar B., Sternberg A., ApJ, 739, 68, (2011).

5) "Supernovae in the Subaru Deep Field: the rate and delay-time distribution of Type Ia supernovae out to redshift 2", Graur O., Poznanski D., Maoz D., Yasuda N., Totani T., Fukugita M., Filippenko A. V., Foley R. J., Silverman J. M., Gal-Yam A., **Horesh A.**, Jannuzi B. T., MNRAS, 417, 916, (2011).

6) "The Progenitor of Supernova 2011dh/PTF11eon in Messier 51", Van Dyk S. D., Li W., Cenko S. B., Kasliwal M. M., **Horesh A.**, Ofek E. O., Kraus A. L., Silverman J. M., Arcavi I., Filippenko A. V., Gal-Yam A., Quimby R. M., Kulkarni S. R., Yaron O., Polishook D., ApJ, 741, L28, (2011).

7) "Lensed arc statistics: comparison of Millennium simulation galaxy clusters to Hubble Space Telescope observations of an X-ray selected sample", **Horesh A.**, Maoz D., Hilbert S., Bartelmann M., MNRAS, 418, 54, (2011).

8) "SN 2011dh: Discovery of a Type IIb Supernova from a Compact Progenitor in the Nearby Galaxy M51", Arcavi I., Gal-Yam A., Yaron O., Sternberg A., Rabinak I., Waxman E., Kasliwal M. M., Quimby R. M., Ofek E. O., **Horesh A.**, Kulkarni S. R., Filippenko A. V., Silverman J. M., Cenko S. B., Li W., Bloom J. S., Sullivan M., Nugent P. E., Poznanski D., Gorbikov E., Fulton B. J., Howell D. A., Bersier D., Riou A., Lamotte-Bailey S., Griga T., Cohen J. G., Hachinger S., Polishook D., Xu D., Ben-Ami S., Manulis I., Walker E. S., Maguire K., Pan Y.-C., Matheson T., Mazzali P. A., Pian E., Fox D. B., Gehrels N., Law N., James P., Marchant J. M., Smith R. J., Mottram C. J., Barnsley R. M., Kandrashoff M. T., Clubb K. I., ApJ, 742, L18, (2011).

9) "The Palomar Transient Factory Photometric Calibration", Ofek E. O., Laher R., Law N., Surace J., Levitan D., Sesar B., **Horesh A.**, Poznanski D., van Eyken J. C., Kulkarni S. R., Nugent P., Zolkower J., Walters R., Sullivan M., Agueros M., Bildsten L., Bloom J., Cenko S. B., Gal-Yam A., Grillmair C., Helou G., Kasliwal M. M., Quimby R., PASP, 124, 62, (2012).

10) "Early Radio and X-Ray Observations of the Youngest nearby Type Ia Supernova PTF 11kly (SN 2011fe)", **Horesh A.**, Kulkarni S. R., Fox D. B., Carpenter J., Kasliwal M. M., Ofek E. O., Quimby R., Gal-Yam A., Cenko S. B., de Bruyn A. G., Kamble A., Wijers R. A. M. J., van der Horst A. J., Kouveliotou C., Podsiadlowski P., Sullivan M., Maguire K., Howell D. A., Nugent P. E., Gehrels N., Law N. M., Poznanski D., Shara M., ApJ, 746, 21, (2012).

11) "SN 2010jp (PTF10aaxi): a jet in a Type II supernova", 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., Sullivan M., MNRAS, 420, 1135, (2012).

12) "Evidence for a Compact Wolf-Rayet Progenitor for the Type Ic Supernova PTF 10vgv", 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., Quimby R. M., ApJ, 747, L5, (2012).

13) "Swift J2058.4+0516: Discovery of a Possible Second Relativistic Tidal Disruption Flare?", Cenko S. B., Krimm H. A., **Horesh A.**, Rau A., Frail D. A., Kennea J. A., Levan A. J., Holland S. T., Butler N. R., Quimby R. M., Bloom J. S., Filippenko A. V., Gal-Yam A., Greiner J., Kulkarni S. R., Ofek E. O., Olivares E. F., Schady P., Silverman J. M., Tanvir N. R., Xu D., ApJ, 753, 77, (2012).

14) "Calcium-rich Gap Transients in the Remote Outskirts of Galaxies", Kasliwal M. M., Kulkarni S. R., Gal-Yam A., Nugent P. E., Sullivan M., Bildsten L., Yaron O., Perets H. B., Arcavi I., Ben-Ami S., Bhalerao V. B., Bloom J. S., Cenko S. B., Filippenko A. V., Frail D. A., Ganeshalingam M., **Horesh A.**, Howell D. A., Law N. M., Leonard D. C., Li W., Ofek E. O., Polishook D., Poznanski D., Quimby R. M., Silverman J. M., Sternberg A., Xu D., ApJ, 755, 161, (2012).

15) "The Palomar Transient Factory photometric catalog 1.0", Ofek E. O., Laher R., Surace J., Levitan D., Sesar B., **Horesh A.**, Law N., van Eyken J. C., Kulkarni S. R., Prince T. A., Nugent P., Sullivan M., Yaron O., Pickles A., Agueros M., Arcavi I., Bildsten L., Bloom J., Cenko S. B.,

Gal-Yam A., Grillmair C., Helou G., Kasliwal M. M., Poznanski D., Quimby R., PASP, 124, 854, (2012).

16) "PTF 11kx: A Type Ia Supernova with a Symbiotic Nova Progenitor", Dilday B., Howell D. A., Cenko S. B., Silverman J. M., Nugent P. E., Sullivan M., Ben-Ami S., Bildsten L., Bolte M., Endl M., Filippenko A. V., Gnat O., **Horesh A.**, Hsiao E., Kasliwal M. M., Kirkman D., Maguire K., Marcy G. W., Moore K., Pan Y., Parrent J. T., Podsiadlowski P., Quimby R. M., Sternberg A., Suzuki N., Tytler D. R., Xu D., Bloom J. S., Gal-Yam A., Hook I. M., Kulkarni S. R., Law N. M., Ofek E. O., Polishook D., Poznanski D., Sci, 337, 942, (2012).

17) "Hubble Space Telescope studies of low-redshift Type Ia supernovae: evolution with redshift and ultraviolet spectral trends", Maguire K., Sullivan M., Ellis R. S., Nugent P. E., Howell D. A., Gal-Yam A., Cooke J., Mazzali P., Pan Y.-C., Dilday B., Thomas R. C., Arcavi I., Ben-Ami S., Bersier D., Bianco F. B., Fulton B. J., Hook I., **Horesh A.**, Hsiao E., James P. A., Podsiadlowski P., Walker E. S., Yaron O., Kasliwal M. M., Laher R. R., Law N. M., Ofek E. O., Poznanski D., Surace J., MNRAS, 426, 2359, (2012).

18) "Discovery and Early Multi-wavelength Measurements of the Energetic Type Ic Supernova PTF12gzk: A Massive-star Explosion in a Dwarf Host Galaxy", Ben-Ami S., Gal-Yam A., Filippenko A. V., Mazzali P. A., Modjaz M., Yaron O., Arcavi I., Cenko S. B., **Horesh A.**, Howell D. A., Graham M. L., Horst J. C., Im M., Jeon Y., Kulkarni S. R., Leonard D. C., Perley D., Pian E., Sand D. J., Sullivan M., Becker J. C., Bersier D., Bloom J. S., Bottom M., Brown P. J., Clubb K. I., Dilday B., Dixon R. C., Fortinsky A. L., Fox D. B., Gonzalez L. A., Harutyunyan A., Kasliwal M. M., Li W., Malkan M. A., Manulis I., Matheson T., Moskovitz N. A., Muirhead P. S., Nugent P. E., Ofek E. O., Quimby R. M., Richards J. W., Ross N. R., Searcy K. J., Silverman J. M., Smith N., Vanderburg A., Walker E. S., ApJ, 760, L33, (2012).

19) "X-Ray Emission from Supernovae in Dense Circumstellar Matter Environments: A Search for Collisionless Shocks", 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., ApJ, 763, 42, (2013).

20) "An outburst from a massive star 40 days before a supernova explosion", Ofek E. O., Sullivan M., Cenko S. B., Kasliwal M. M., Gal-Yam A., Kulkarni S. R., Arcavi I., Bildsten L., Bloom J. S., **Horesh A.**, Howell D. A., Filippenko A. V., Laher R., Murray D., Nakar E., Nugent P. E., Silverman J. M., Shaviv N. J., Surace J., Yaron O., Natur, 494, 65, (2013).

21) "Illuminating the Darkest Gamma-Ray Bursts with Radio Observations", Zauderer B. A., Berger E., Margutti R., Levan A. J., Olivares E. F., Perley D. A., Fong W., **Horesh A.**, Updike A. C., Greiner J., Tanvir N. R., Laskar T., Chornock R., Soderberg A. M., Menten K. M., Nakar E., Carpenter J., Chandra P., Castro-Tirado A. J., Bremer M., Gorosabel J., Guziy S., Perez-Ramirez D., Winters J. M., ApJ, 767, 161, (2013).

22) "Sensitive Search for Radio Variables and Transients in the Extended Chandra Deep Field South", Mooley K. P., Frail D. A., Ofek E. O., Miller N. A., Kulkarni S. R., **Horesh A.**, ApJ, 768, 165, (2013).

23) "Discovery of a Cosmological, Relativistic Outburst via its Rapidly Fading Optical Emission", 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 K. J., Silverman J. M., Sternberg A., ApJ, 769, 130, (2013).

24) "Type Ia Supernovae Strongly Interacting with Their Circumstellar Medium", Silverman J. M., Nugent P. E., Gal-Yam A., Sullivan M., Howell D. A., Filippenko A. V., Arcavi I., Ben-Ami S., Bloom J. S., Cenko S. B., Cao Y., Chornock R., Clubb K. I., Coil A. L., Foley R. J., Graham M. L., Griffith C. V., **Horesh A.**, Kasliwal M. M., Kulkarni S. R., Leonard D. C., Li W., Matheson T., Miller A. A., Modjaz M., Ofek E. O., Pan Y.-C., Perley D. A., Poznanski D., Quimby R. M., Steele T. N., Sternberg A., Xu D., Yaron O., ApJS, 207, 3, (2013).

25) "Discovery, Progenitor and Early Evolution of a Stripped Envelope Supernova iPTF13bvn", Cao Y., Kasliwal M. M., Arcavi I., **Horesh A.**, Hancock P., Valenti S., Cenko S. B., Kulkarni S. R., Gal-Yam A., Gorbikov E., Ofek E. O., Sand D., Yaron O., Graham M., Silverman J. M., Wheeler J. C., Marion G. H., Walker E. S., Mazzali P., Howell D. A., Li K. L., Kong A. K. H., Bloom J. S., Nugent P. E., Surace J., Masci F., Carpenter J., Degenaar N., Gelino C. R., ApJ, 775, L7, (2013).

26) "Discovery and Redshift of an Optical Afterglow in 71 $\deg^2$: iPTF13bxl and GRB 130702A", 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. J., McEnery J., Rau A., Surace J. A., Yaron O., ApJ, 776, L34, (2013).

27) "PTF 12gzk - A Rapidly Declining, High-velocity Type Ic Radio Supernova", **Horesh A.**, Kulkarni S. 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., ApJ, 778, 63, (2013).

28) "An early and comprehensive millimetre and centimetre wave and X-ray study of SN 2011dh: a non-equipartition blast wave expanding into a massive stellar wind", **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 O., Ryder S., Weiler K. W., Bauer F., Van Dyk S. D., Immler S., Panagia N., Pooley D., Kassim N., MNRAS, 436, 1258, (2013).

29) "The Afterglow of GRB 130427A from 1 to 10^{16} GHz", 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., 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., Volvach A. E., Wang J.-G., Winters J.-M., Xin Y.-X., ApJ, 781, 37, (2014).

30) "A Multi-wavelength Investigation of the Radio-loud Supernova PTF11qcj and its Circumstellar Environment", 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., ApJ, 782, 42, (2014).

31) "The Rise of SN 2014J in the Nearby Galaxy M82", Goobar A., Johansson J., Amanullah R., Cao Y., Perley D. A., Kasliwal M. M., Ferretti R., Nugent P. E., Harris C., Gal-Yam A., Ofek E. O., Tendulkar S. P., Dennefeld M., Valenti S., Arcavi I., Banerjee D. P. K., Venkataraman V., Joshi V., Ashok N. M., Cenko S. B., Diaz R. F., Fremling C., **Horesh A.**, Howell D. A., Kulkarni S. R., Papadogiannakis S., Petrushevska T., Sand D., Sollerman J., Stanishev V., Bloom J. S., Surace J., Dupuy T. J., Liu M. C., ApJ, 784, L12, (2014).

32) "X-Ray Spectral Components Observed in the Afterglow of GRB 130925A", Bellm E. C., Barriere N. M., Bhalerao V., Boggs S. E., Cenko S. B., Christensen F. E., Craig W. W., Forster K., Fryer C. L., Hailey C. J., Harrison F. A., **Horesh A.**, Kouveliotou C., Madsen K. K., Miller J. M., Ofek E. O., Perley D. A., Rana V. R., Reynolds S. P., Stern D., Tomsick J. A., Zhang W. W., ApJ, 784,

L19, (2014).

33) "SN 2010mb: Direct Evidence for a Supernova Interacting with a Large Amount of Hydrogen-free Circumstellar Material", Ben-Ami S., Gal-Yam A., Mazzali P. A., Gnat O., Modjaz M., Rabinak I., Sullivan M., Bildsten L., Poznanski D., Yaron O., Arcavi I., Bloom J. S., **Horesh A.**, Kasliwal M. M., Kulkarni S. R., Nugent P. E., Ofek E. O., Perley D., Quimby R., Xu D., ApJ, 785, 37, (2014).

34) "Evidence for dust destruction from the early-time colour change of GRB 120119A", Morgan A. N., Perley D. A., Cenko S. B., Bloom J. S., Cucchiara A., Richards J. W., Filippenko A. V., Haislip J. B., LaCluyze A., Corsi A., Melandri A., Cobb B. E., Gomboc A., **Horesh A.**, James B., Li W., Mundell C. G., Reichart D. E., Steele I., MNRAS, 440, 1810, (2014).

35) "A Wolf-Rayet-like progenitor of SN 2013cu from spectral observations of a stellar wind", Gal-Yam A., Arcavi I., Ofek E. O., Ben-Ami S., Cenko S. B., Kasliwal M. M., Cao Y., Yaron O., Tal D., Silverman J. M., **Horesh A.**, De Cia A., Taddia F., Sollerman J., Perley D., Vreeswijk P. M., Kulkarni S. R., Nugent P. E., Filippenko A. V., Wheeler J. C., Natur, 509, 471, (2014).

36) "3C 220.3: A Radio Galaxy Lensing a Submillimeter Galaxy", Haas M., Leipski C., Barthel P., Wilkes B. J., Vegetti S., Bussmann R. S., Willner S. P., Westhues C., Ashby M. L. N., Chini R., Clements D. L., Fassnacht C. D., **Horesh A.**, Klaas U., Koopmans L. V. E., Kuraszkiewicz J., Lagattuta D. J., Meisenheimer K., Stern D., Wylezalek D., ApJ, 790, 46, (2014).

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55) "Localization and Broadband Follow-up of the Gravitational-wave Transient GW150914", Abbott B. P., et al. , ApJS, 225, 8, (2016).

Papers in Final Stages of Preparation

Horesh, A. et al., "A first discovery of a Type Ib supernova with a plateau - Implications for the progenitor star"

Conference Proceedings

"SN 2010jp (PTF10aaxi): A Jet-driven Type II Supernova", 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., Sullivan M., IAUS, 279, 159, (2012).

"Radio Insight into the Nature of Type IIb Progenitors", Stockdale C. J., Ryder S. D., **Horesh A.**, Weiler K. W., Panagia N., Van Dyk S. D., Bauer F. E., Immler S., Sramek R. A., Pooley D., Marcaide J. M., Kassim N., IAUS, 279, 393, (2012).

Accepted Observing Proposals (PI)

CARMA - 2011B - "Exploring Fast Evolving Transients"

EVLA - 2012A+2012B - "Short Lived Optical Transients"

CARMA - 2012A - "Exploring Short-lived Optical Transients"

EVLA (DDT) - "A search for collisions less shocks in recent nearby type IIn supernovae"

CARMA - 2012B - "Exploring Optical Transients in mm-wavelength"

Keck Observatory - 2013A - "MACS1354+77: A new bullet cluster?"

EVLA (DDT) - "Exploring the nature of a "fast" radio supernova"

Swift - Cycle 9 - "An X-Ray view of non-thermal tidal disruption events" ($30,000)

EVLA (DDT) - "VLBA Observations of a Recent Tidal-Disruption-Event candidate"

JVLA - 2013A - "A Search For Collisionless Shocks In Recent Nearby Type IIn Supernovae"

CARMA - 2013A - "A Search For Collisionless Shocks In Recent Nearby Type IIn Supernovae"

CARMA 2013A "Exploring Optical Transients in mm-Wavelength"

CARMA - 2013B - "Revealing Accretion Disk Coronae with CARMA: A Pilot Survey"

Keck Observatory + Palomar Observatory - 2013B - "Exploring a New Population of Compact

Radio Sources"

JVLA - 2013B+2014A - "Radio Followup of iPTF Transients"

CARMA (DDT) - "A search for mm-emission from a SN surrounded by extremely massive CSM"

Keck Observatory - 2014A - "Exploring a New Population of Compact Radio Sources"

JVLA - 2014A+B - "A Different Class of Ia Supernovae?"

JVLA (DDT) - "VLA Observations of a Newly Discovered Swift Tidal Disruption Event Candidate"

JVLA DDT - A VLBA observation of GRB130925A

JVLA (DDT) - Radio Observation of iPTF13dqy - A Probe of Pre-explosion Massive Star Evolution

ATCA - 2014A + B - "A Different Class of Ia Supernovae?"

Hubble Space telescope - Cycle 22+23 - "Characterizing New Fast Optical Transients with HST: Astrometry, Geometry, and Host Galaxies" (Co-PI)

JVLA - 2015A+B - "Understanding the Mysterious Nature of Ultra-long GRBs"

JVLA - 2015B + 2016A - "CSM-Ia supernovae - A different class of Type Ia supernovae?"

ATCA (DDT) - "Searching for a radio flare from a kilonova candidate"

JVLA (DDT) - "Searching for the power source of the 250 days old supernova, iPTF14hls"

JVLA (DDT) - "A Peculiar Type Ib Supernova - A Search for The SN-GRB Connection"

JVLA - 2016A - "Late-time radio observations of compact binary merger candidates"

JVLA - 2016A - "Exploring the Nature of Faint Compact Radio Sources in red-n-dead Galaxies"

JVLA - 2016A+B - "VLA Observations of Optically Discovered Tidal Disruption Event Candidate"

JVLA - 2016A+B, 2017A+B - "Understanding the mysterious nature of ultra-long GRBs"

Accepted Observing Proposals (Co-I)

Chandra Space Telescope - cycle 11 33ks

Keck Observatory - 2011B - "Palomar Transient Factory: A Discovery Machine"

Keck Observatory - 2011B (TOO) - "Exotic Transients in the Local Universe"

Palomar Observatory - 2011B - "Palomar Transient Factory: A Discovery Machine"

EVLA (DDT) - "PTF11agg: A Rare GRB without a Detected Gamma-Ray Burst?"

EVLA (DDT) - "The Emerging Class of Prompt Relativistic Outflows from Supermassive Black Holes"

Keck Observatory - 2012A - "Exploring and Explaining the Dynamic Sky"

Keck Observatory - 2012A (TOO) "Exotic Transients in the Local Universe"

Palomar Observatory - 2012A - "Palomar Transient Factory: A Discovery Machine"

EVLA (DDT) - "Monitoring the Afterglow of GRB 111215A: High-redshift of Heavily Obscured"

HST - Cycle 20 - 2 orbits ($10,300)

Keck Observatory - 2012B - "Exploring and Explaining the Dynamical Sky"

Palomar Observatory - 2012B - "Exploring and Explaining the Dynamical Sky"

CARMA - 2012B - "Target-of-Opportunity Observations of GRB Afterglows"

HST - Cycle 21 - "Determining the Progenitor of SN2011dh as a Test of Supernova Shock Cooling

Models”

JVLA - 2013B+2014A - “A 300 Square Degree VLA Transient Survey in Stripe 82”

JVLA - 2013B - “A Pilot X-Band Synoptic Survey of SDSS Stripe-82”

CARMA (DDT) - “A search for mm-emission from a supernova surrounded by extremely massive CSM”

JVLA (DDT) - “Constraining the Nature of Three Nearby TDE Candidates”

HST - Cycle 22 - “The environment of the rarest and most energetic supernovae: do pair-instability explosions exist in the nearby Universe?”

EVLA - 2015A - “300 Square Degree VLA Transient Survey in Stripe 82 - Final Epochs”

EVLA - 2015A - “Search for a radio flare from the macronova/kilonova associated with GRB 130603B”

EVLA - 2015A+B “Radio fingerprints of relativistic explosions in the advanced LIGO era”

Swift - Cycle 11 - “Understanding young supernovae and exotic transients with swift and iPTF”

Swift - Cycle 11 - “A window to quiescent massive black holes: Swift followup of tidal disruption evenets”

Swift - Cycle 11 - “Discovering GBM GRB afterglows with iPTF”

JVLA (DDT) - “Is Supernova ASSASN15oz powered by interaction ?”

JVLA (DDT) - “GRB 141121A: An ultra-long GRB with a reverse shock?”

JVLA - 2016A+B - ”Early Radio Emission From Coalescence of Neutron Stars”