

KAIT PUBLICATIONS (* = refereed journals)

The following papers are based at least in part on KAIT results.

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- *1) A. G. Riess, A. V. Filippenko, W. Li, R. R. Treffers, B. P. Schmidt, Y. Qiu, J. Hu, M. Armstrong, C. Faranda, and E. Thouvenot (1999). *Astron. Jour.*, **118**, 2675–2688. “The Risetime of Nearby Type Ia Supernovae.”
- *2) E. C. Moran, A. V. Filippenko, L. C. Ho, J. C. Shields, T. Belloni, A. Comastri, S. L. Snowden, and R. A. Sramek (1999). *Publ. Astron. Soc. Pacific*, **111**, 801–808. “The Nuclear Spectral Energy Distribution of NGC 4395, the Least Luminous Type 1 Seyfert Galaxy.”
- *3) T. Matheson, A. V. Filippenko, R. Chornock, D. C. Leonard, and W. Li (2000). *Astron. Jour.*, **119**, 2303–2310. “Helium Emission Lines in the Type Ic Supernova 1999cq.”
- *4) S. D. Van Dyk, C. Y. Peng, J. Y. King, A. V. Filippenko, R. R. Treffers, W. Li, and M. W. Richmond (2000). *Publ. Astron. Soc. Pacific*, **112**, 1532–1541. “SN 1997bs in M66: Another Extragalactic Eta Carinae Analog?”
- 5) W. D. Li, A. V. Filippenko, A. G. Riess, R. R. Treffers, J. Y. Hu, and Y. L. Qiu (2000). In *Cosmic Explosions*, ed. S. S. Holt and W. W. Zhang (New York: American Institute of Physics), 91–94. “A High Peculiarity Rate for Type Ia SNe.”
- 6) W. D. Li, A. V. Filippenko, R. R. Treffers, A. Friedman, E. Halderson, R. A. Johnson, J. Y. King, M. Modjaz, M. Papenkova, Y. Sato, and T. Shefler (2000). In *Cosmic Explosions*, ed. S. S. Holt and W. W. Zhang (New York: American Institute of Physics), 103–106. “The Lick Observatory Supernova Search.”
- 7) A. V. Filippenko (2000). In *Amateur-Professional Partnerships in Astronomy*, ed. J. R. Percy and J. B. Wilson (San Francisco: Astron. Soc. Pacific, Conf. Ser., Volume 220), 185–187. “Discovery and Optical Monitoring of Nearby Supernovae.”
- *8) W. Li, A. V. Filippenko, and A. G. Riess (2001). *Astrophys. Jour.*, **546**, 719–733. “Monte Carlo Simulations of Type Ia Supernova Observations in Supernova Surveys.”
- *9) W. Li, A. V. Filippenko, R. R. Treffers, A. G. Riess, J. Hu, and Y. Qiu (2001). *Astrophys. Jour.*, **546**, 734–743. “A High Intrinsic Peculiarity Rate Among Type Ia Supernovae.”
- *10) T. Matheson, A. V. Filippenko, W. Li, D. C. Leonard, and J. C. Shields (2001). *Astron. Jour.*, **121**, 1648–1675. “Optical Spectroscopy of Type Ib/Ic Supernovae.”
- *11) M. Modjaz, W. Li, A. V. Filippenko, J. Y. King, D. C. Leonard, T. Matheson, R. R. Treffers, and A. G. Riess (2001). *Publ. Astron. Soc. Pacific*, **113**, 308–325. “The Subluminous Type Ia Supernova 1998de in NGC 252.”
- *12) D. C. Leonard and A. V. Filippenko (2001). *Publ. Astron. Soc. Pacific*, **113**, 920–936. “Spectropolarimetry of the Type II Supernovae 1997ds, 1998A, and 1999gi.”
- 13) A. V. Filippenko, W. D. Li, R. R. Treffers, and M. Modjaz (2001). In *Small-Telescope Astronomy on Global Scales*, ed. W. P. Chen, C. Lemme, and B. Paczynski (San Francisco: Astron. Soc. Pacific, Conf. Ser. Vol. 246), 121–130. “The Lick Observatory Supernova Search with the Katzman Automatic Imaging Telescope.”
- *14) W. Li, A. V. Filippenko, E. Gates, R. Chornock, A. Gal-Yam, E. O. Ofek, D. C. Leonard, M. Modjaz, R. M. Rich, A. G. Riess, and R. R. Treffers (2001). *Publ. Astron. Soc. Pacific*, **113**, 1178–1204. “The Unique Type Ia Supernova 2000cx in NGC 524.”

- *15) W. C. G. Ho, S. D. Van Dyk, C. Y. Peng, A. V. Filippenko, D. C. Leonard, T. Matheson, R. R. Treffers, and M. W. Richmond (2001). *Publ. Astron. Soc. Pacific*, **113**, 1349–1364. “*BVRI* Photometry of Supernovae.”
- *16) O. Shemmer, *et al.* (2001). *Astrophys. Jour.*, **561**, 162–170. “Multiwavelength Monitoring of the Narrow-Line Seyfert 1 Galaxy Akn 564. III. Optical Observations and the Optical–UV–X-ray Connection.”
- *17) R. Kurtev, L. Georgiev, J. Borissova, W. D. Li, A. V. Filippenko, and R. R. Treffers (2001). *Astron. Astrophys.*, **378**, 449–454. “The First Known Mira-type Variable Star in IC 1613.”
- *18) D. C. Leonard, A. V. Filippenko, E. L. Gates, W. Li, R. G. Eastman, A. J. Barth, S. J. Bus, R. Chornock, A. L. Coil, S. Frink, C. A. Grady, A. W. Harris, M. A. Malkan, T. Matheson, A. Quirrenbach, and R. R. Treffers (2002). *Publ. Astron. Soc. Pacific*, **114**, 35–64. “The Distance to SN 1999em in NGC 1637 from the Expanding Photosphere Method.” [*Erratum*: **114**, 1291 (2002).]
- *19) W. Li, A. V. Filippenko, S. D. Van Dyk, J. Hu, Y. Qiu, M. Modjaz, and D. C. Leonard (2002). *Publ. Astron. Soc. Pacific*, **114**, 403–415. “A *Hubble Space Telescope* Snapshot Survey of Nearby Supernovae.”
- *20) S. van den Bergh, W. Li, and A. V. Filippenko (2002). *Publ. Astron. Soc. Pacific*, **114**, 820–825. “Classifications of the Host Galaxies of Supernovae.”
- *21) D. C. Leonard, A. V. Filippenko, W. Li, T. Matheson, R. P. Kirshner, R. Chornock, S. D. Van Dyk, P. Berlind, M. L. Calkins, P. M. Challis, P. M. Garnavich, S. Jha, and A. Mahdavi (2002). *Astron. Jour.*, **124**, 2490–2505. “A Study of the Type II-Plateau Supernova 1999gi, and the Distance to its Host Galaxy, NGC 3184.”
- *22) D. C. Leonard, A. V. Filippenko, R. Chornock, and W. Li (2002). *Astron. Jour.*, **124**, 2506–2515. “Evidence for Extremely High Dust Polarization Efficiency in NGC 3184.”
- *23) S. D. Van Dyk, W. Li, and A. V. Filippenko (2003). *Publ. Astron. Soc. Pacific*, **115**, 1–20. “A Search for Core-Collapse Supernova Progenitors in Hubble Space Telescope Images.” [Addendum: p. 21.]
- 24) S. D. Van Dyk, W. Li, and A. V. Filippenko (2003). In *From Twilight to Highlight: The Physics of Supernovae*, ed. W. Hillebrandt and B. Leibundgut (Berlin: Springer-Verlag), 33–36. “Core-Collapse Supernova Progenitors in Hubble Space Telescope Images.”
- 25) A. V. Filippenko (2003). In *From Twilight to Highlight: The Physics of Supernovae*, ed. W. Hillebrandt and B. Leibundgut (Berlin: Springer-Verlag), 171–182. “Optical Spectra and Light Curves of Supernovae.”
- *26) W. Li, A. V. Filippenko, R. Chornock, and S. Jha (2003). *Astrophys. Jour. (Letters)*, **586**, L9–L12. “The Early Light Curve of the Optical Afterglow of GRB 021211.”
- *27) W. Li, A. V. Filippenko, R. Chornock, E. Berger, P. Berlind, M. L. Calkins, P. Challis, C. Fassnacht, S. Jha, R. P. Kirshner, T. Matheson, W. L. W. Sargent, R. A. Simcoe, G. H. Smith, and G. Squires (2003). *Publ. Astron. Soc. Pacific*, **115**, 453–473. “SN 2002cx: The Most Peculiar Known Type Ia Supernova.”
- *28) W. Li, A. V. Filippenko, R. Chornock, and S. Jha (2003). *Publ. Astron. Soc. Pacific*, **115**, 844–853. “The Katzman Automatic Imaging Telescope Gamma-Ray Burst Alert System, and Observations of GRB 020813.”
- *29) R. J. Foley, M. S. Papenkova, B. J. Swift, A. V. Filippenko, W. Li, P. A. Mazzali, R. Chornock, D. C. Leonard, and S. D. Van Dyk (2003). *Publ. Astron. Soc. Pacific*, **115**, 1220–1235. “Optical Photometry and Spectroscopy of the SN 1998bw-like Type Ic Supernova 2002ap.”

- *30) S. van den Bergh, W. Li, and A. V. Filippenko (2003). *Publ. Astron. Soc. Pacific*, **115**, 1280–1288. “Classifications of the Host Galaxies of Supernovae, Set II.”
- *31) S. D. Van Dyk, W. Li, and A. V. Filippenko (2003). *Publ. Astron. Soc. Pacific*, **115**, 1289–1295. “On the Progenitor of the Type II-Plateau Supernova 2003gd in M74.”
- *32) T. Matheson, *et al.* (2003). *Astrophys. Jour.*, **599**, 394–407. “Photometry and Spectroscopy of GRB 030329 and Its Associated Supernova 2003dh: The First Two Months.”
- *33) R. M. Wagner, F. J. Vrba, A. A. Henden, B. Canzian, C. B. Luginbuhl, A. V. Filippenko, R. Chornock, W. Li, G. D. Schmidt, P. S. Smith, and S. Starrfield (2004). *Publ. Astron. Soc. Pacific*, **116**, 326–336. “Discovery and Evolution of an Unusual Luminous Variable Star in NGC 3432 (Supernova 2000ch).”
- 34) A. V. Filippenko (2004). In *The Early Universe and Observational Cosmology (Lecture Notes in Physics*, **646**), ed. N. Bretón, J. L. Cervantes-Cota, and M. Salgado (Berlin: Springer-Verlag), 191–221. “The Accelerating Universe and Dark Energy: Evidence from Type Ia Supernovae.”
- 35) A. V. Filippenko (2004). In *Carnegie Observatories Astrophysics Series, Vol. 2: Measuring and Modeling the Universe*, ed. W. L. Freedman (Cambridge: Cambridge Univ. Press), 270–290. “Evidence from Type Ia Supernovae for an Accelerating Universe and Dark Energy.”
- *36) W. Li, S. D. Van Dyk, A. V. Filippenko, and J.-C. Cuillandre (2005). *Publ. Astron. Soc. Pacific*, **117**, 121–131. “On the Progenitor of the Type II Supernova 2004et in NGC 6946”
- 37) A. V. Filippenko (2005). In *The Fate of the Most Massive Stars*, ed. R. Humphreys and K. Stanek (San Francisco: Astron. Soc. Pacific), 33–43. “Supernovae and Their Massive Star Progenitors.”
- *38) K. Y. Huang, *et al.* (2005). *Astrophys. Jour. (Letters)*, **628**, L93–L96. “Optical Afterglow Observations of the Unusual Short-Duration Gamma-Ray Burst 040924.”
- *39) S. van den Bergh, W. Li, and A. V. Filippenko (2005). *Publ. Astron. Soc. Pacific*, **117**, 773–782. “Classifications of the Host Galaxies of Supernovae, Set III.”
- *40) C. M. Hamilton, *et al.* (2005). *Astron. Jour.*, **130**, 1896–1915. “The Disappearing Act of KH 15D: Photometric Results from 1995 to 2004.”
- *41) D. C. Leonard, W. Li, A. V. Filippenko, R. J. Foley, and R. Chornock (2005). *Astrophys. Jour.*, **632**, 450–475. “Evidence for Spectropolarimetric Diversity in Type Ia Supernovae.”
- 42) A. V. Filippenko (2005). In “White Dwarfs: Cosmological and Galactic Probes,” ed. E. M. Sion, S. Vennes, and H. L. Shipman (Dordrecht: Springer), 97–133. “Type Ia Supernovae and Cosmology.”
- *43) J. L. Sokoloski, *et al.* (2006). *Astrophys. Jour.*, **636**, 1002–1019. “A ‘Combination Nova’ Outburst in Z Andromedae: Nuclear Shell Burning Triggered by a Disk Instability.”
- *44) M. Hamuy, *et al.* (2006). *Publ. Astron. Soc. Pacific*, **118**, 2–20. “The Carnegie Supernova Project: The Low-Redshift Survey.”
- *45) W. Li, S. Jha, A. V. Filippenko, J. S. Bloom, D. Pooley, R. J. Foley, and D. A. Perley (2006). *Publ. Astron. Soc. Pacific*, **118**, 37–61. “The Calibration of the *Swift* UVOT Optical Observations: A Recipe for Photometry.”
- *46) A. Gal-Yam, E. O. Ofek, D. Poznanski, A. Levinson, E. Waxman, D. A. Frail, A. M. Soderberg, E. Nakar, W. Li, and A. V. Filippenko (2006). *Astrophys. Jour.*, **639**, 331–339. “Radio and Optical Follow-up Observations of a Uniform Radio Transient Search: Implications for Gamma-Ray Bursts and Supernovae”

- *47) D. C. Leonard, A. V. Filippenko, M. Ganeshalingam, F. J. D. Serduke, W. Li, B. J. Swift, A. Gal-Yam, R. J. Foley, D. B. Fox, S. Park, J. L. Hoffman, and D. S. Wong (2006). *Nature*, **440**, 505–507. “A Non-Spherical Core in the Explosion of Supernova SN 2004dj.”
- *48) S. D. Van Dyk, W. Li, and A. V. Filippenko (2006). *Pub. Astron. Soc. Pacific*, **118**, 351–357. “The Light Echo around Supernova 2003gd in Messier 74.”
- *49) G. Folatelli, *et al.* (2006). *Astrophys. Jour.*, **641**, 1039–1050. “SN 2005bf: A Possible Transition Event between Type Ib/c Supernovae and Gamma-Ray Bursts.”
- *50) W. Li, S. D. Van Dyk, A. V. Filippenko, J.-C. Cuillandre, S. Jha, J. S. Bloom, A. G. Riess, and M. Livio (2006). *Astrophys. Jour.*, **641**, 1060–1070. “Identification of the Red Supergiant Progenitor of Supernova 2005cs: Do the Progenitors of Type II-P Supernovae Have Low Mass?”
- *51) M. Pozzo, W. P. S. Meikle, J. T. Rayner, R. D. Joseph, A. V. Filippenko, R. J. Foley, W. Li, S. Mattila, and J. Sollerman (2006). *Mon. Notices of the Royal Astr. Soc.*, **368**, 1169–1195 [Erratum: **375**, 416–416 (2007)]. “Optical and Infrared Observations of the Type IIP SN 2002hh from Days 3 to 397.”
- *52) P. Ferrero, *et al.* (2006). *Astron. Astrophys.*, **457**, 857–864. “The GRB 060218/SN 2006aj Event in the Context of Other Gamma-Ray Burst Supernovae.”
- *53) L.-B. Desroches, *et al.* (2006). *Astrophys. Jour.*, **650**, 88–101. “Multiwavelength Monitoring of the Dwarf Seyfert 1 Galaxy NGC 4395. III. Optical Variability and X-Ray/UV/Optical Correlations.”
- *54) N. R. Butler, W. Li, D. Perley, K. Y. Huang, Y. Urata, J. X. Prochaska, J. S. Bloom, A. V. Filippenko, R. J. Foley, D. Kocevski, H.-W. Chen, Y. Qiu, P. H. Kuo, F. Y. Huang, W. H. Ip, T. Tamagawa, K. Onda, M. Tashiro, K. Makishima, S. Nishihara, and Y. Sarugaku (2006). *Astrophys. Jour.*, **652**, 1390–1399. “When Do Internal Shocks End and External Shocks Begin? Early-Time Broadband Modeling of GRB 051111.”
- *55) A. Gal-Yam, D. C. Leonard, D. B. Fox, S. B. Cenko, A. M. Soderberg, D.-S. Moon, D. J. Sand, W. Li, A. V. Filippenko, G. Aldering, and Y. Copin (2007). *Astrophys. Jour.*, **656**, 372–381. “On the Progenitor of SN 2005gl and the Nature of Type IIn Supernovae.”
- *56) R. J. Foley, N. Smith, M. Ganeshalingam, W. Li, R. Chornock, and A. V. Filippenko (2007). *Astrophys. Jour. (Letters)*, **657**, L105–L108. “SN 2006jc: A Wolf-Rayet Star Exploding in a Dense He-Rich Circumstellar Medium.”
- *57) M. M. Phillips, *et al.* (2007). *Publ. Astron. Soc. Pacific*, **119**, 360–387. “The Peculiar SN 2005hk: Do Some Type Ia Supernovae Explode as Deflagrations?”
- *58) S. R. Kulkarni, *et al.* (2007). *Nature*, **447**, 458–460. “An Unusually Brilliant Transient in the Galaxy M85.”
- *59) A. Pastorello, *et al.* (2007). *Mon. Notices of the Royal Astr. Soc.*, **377**, 1531–1552. “ESC and KAIT Observations of the Transitional Type Ia SN 2004eo.”
- *60) W. Li, X. Wang, S. D. Van Dyk, J.-C. Cuillandre, R. J. Foley, and A. V. Filippenko (2007). *Astrophys. Jour.*, **661**, 1013–1024. “On the Progenitors of Two Type II-P Supernovae in the Virgo Cluster.”
- *61) N. Smith, *et al.* (2007). *Astrophys. Jour.*, **666**, 1116–1128. “SN 2006gy: Discovery of the Most Luminous Supernova Ever Recorded, Powered by the Death of an Extremely Massive Star Like Eta Carinae.”
- *62) J. D. Simon, *et al.* (2007). *Astrophys. Jour. Lett.*, **671**, L25–L28. “Constraints on Circumstellar Material around the Type Ia Supernova 2007af.”

- 63) A. V. Filippenko (2008). In “State of the Universe 2008,” ed. M. Ratcliffe (Praxis Publishing Ltd, UK), 170–182 “Chasing a Runaway Universe... Dark Energy and the Accelerating Universe.”
- *64) D. A. Perley, *et al.* (2008). *Astrophysical Jour.*, **672**, 449–464. “The Troublesome Broadband Evolution of GRB 061126: Does a Grey Burst Imply Grey Dust?”
- *65) S. Valenti, *et al.* (2008). *Mon. Not. Royal Astr. Soc.*, **383**, 1485–1500. “The Broad-Lined Type Ic Supernova 2003jd.”
- *66) N. Elias-Rosa, *et al.* (2008). *Mon. Not. Royal Astr. Soc.*, **384**, 107–122. “SN 2002cv: A Heavily Obscured Type Ia Supernova.”
- *67) X. Wang, *et al.* (2008). *Astrophys. Jour.*, **675**, 626–643. “Optical and Near-Infrared Observations of the Highly Reddened, Rapidly Expanding Type Ia Supernova 2006X in M100.”
- *68) A. C. Updike, *et al.* (2008). *Astrophys. Jour.*, **685**, 361–375. “The Rapidly Flaring Afterglow of the Very Bright and Energetic GRB 070125.”
- *69) J. S. Gallagher, P. M. Garnavich, N. Caldwell, R. P. Kirshner, S. W. Jha, W. Li, M. Ganeshalingam, and A. V. Filippenko (2008). *Astrophys. Jour.*, **685**, 752–766. “Supernovae in Early-Type Galaxies: Directly Connecting Age and Metallicity with Type Ia Luminosity.”
- *70) N. Smith, *et al.* (2008), *Astrophys. Jour.*, **686**, 467–484. “SN 2006tf: Precursor Eruptions and the Optically Thick Regime of Extremely Luminous Type IIn Supernovae.”
- *71) N. Smith, R. J. Foley, J. S. Bloom, W. Li, A. V. Filippenko, R. Gavazzi, A. Ghez, Q. Konopacky, M. A. Malkan, P. J. Marshall, D. Pooley, T. Treu, and J.-H. Woo (2008). *Astrophys. Jour.*, **686**, 485–491.. “Late-Time Observations of SN 2006gy: Still Going Strong.”
- *72) D. A. Perley, *et al.* (2008). *Astrophys. Jour.*, **688**, 470–490. “GRB 071003: Broadband Follow-up Observations of a Very Bright Gamma-Ray Burst in a Galactic Halo.”
- *73) A. A. Miller, R. Chornock, D. A. Perley, M. Ganeshalingam, W. Li, N. R. Butler, J. S. Bloom, N. Smith, M. Modjaz, D. Poznanski, A. V. Filippenko, C. V. Griffith, J. H. Shiode, and J. M. Silverman (2009). *Astrophys. Jour.*, **690**, 1303–1312 . “The Exceptionally Luminous Type II-Linear Supernova 2008es.”
- *74) K. Maeda, K. Kawabata, W. Li, M. Tanaka, P. A. Mazzali, T. Hattori, K. Nomoto, and A. V. Filippenko (2009). *Astrophys. Jour.*, **690**, 1745–1752. “Subaru and Keck Observations of the Peculiar Type Ia Supernova 2006gz at Late Phases.”
- *75) J. Prochaska, *et al.* (2009). *Astrophys. Jour. (Letters)*, **691**, L27–L32. “First Detection of Molecular Gas in a GRB Host Galaxy.”
- *76) J. Bloom, *et al.* (2009). *Astrophys. Jour.*, **691**, 723–737. “Observations of the Naked-Eye GRB 080319B: Implications of Nature’s Brightest Explosion.”
- *77) D. Poznanski, *et al.* (2009). *Astrophys. Jour.*, **694**, 1067–1079. “Improved Standardization of Type II-P Supernovae: Application to an Expanded Sample.”
- *78) N. Smith, J. M. Silverman, R. Chornock, A. V. Filippenko, X. Wang, W. Li, M. Ganeshalingam, R. J. Foley, J. Rex, and T. N. Steele (2009). *Astrophys. Jour.*, **695**, 1334–1350. “Coronal Lines and Dust Formation in SN 2005ip: Not the Brightest, but the Hottest Type IIn Supernova.”
- *79) M. I. Jones, M. Hamuy, P. Lira, J. Maza, A. Clocchiatti, M. Phillips, N. Morrell, M. Roth, N. B. Suntzeff, T. Matheson, A. V. Filippenko, R. J. Foley, and D. C. Leonard

- (2009). *Astrophys. Jour.*, **696**, 1176–1194. “Distance Determination to 12 Type II Supernovae Using the Expanding Photosphere Method.”
- *80) X. Wang, *et al.* (2009). *Astrophys. Jour.*, **697**, 380–408. “The Golden Standard Type Ia Supernova 2005cf: Observations from the Ultraviolet to the Near-Infrared Wavebands.”
- *81) A. Melandri, *et al.* (2009). *Mon. Not. Royal Astr. Soc.*, **395**, 1941–1949. “Evidence for Energy Injection and a Fine-Tuned Central Engine at Optical Wavelengths in GRB 070419A.”
- *82) A. G. Riess, L. Macri, W. Li, H. Lampeitl, S. Casertano, H. C. Ferguson, A. V. Filippenko, S. W. Jha, R. Chornock, L. Greenhill, M. Mutchler, and M. Ganeshalingam (2009). *Astrophys. Jour.*, **183**, 109–141. “Cepheid Calibrations of Modern Type Ia Supernovae: Implications for the Hubble Constant.”
- *83) X. Wang, *et al.* (2009). *Astrophys. Jour.*, **699**, L139–L143. “Improved Distances to Type Ia Supernovae with Two Spectroscopic Subclasses.”
- *84) R. J. Foley, *et al.* (2009). *Astron. Jour.*, **138**, 376–391. “SN 2008ha: An Extremely Low Luminosity and Extremely Low Energy Supernova.”
- *85) M. Modjaz, *et al.* (2009). *Astrophys. Jour.*, **702**, 226–248. “From Shock Breakout to Peak and Beyond: Extensive Panchromatic Observations of the Aspherical Type Ib Supernova 2008D Associated with Swift X-ray Transient 080109.”
- *86) J. D. Simon, *et al.* (2009). *Astrophys. Jour.*, **702**, 1157–1170. “Variable Sodium Absorption in a Low-Extinction Type Ia Supernova.”
- *87) G. Leloudas, *et al.* (2009). *Astron. Astrophys.*, **505**, 265–279. “The Normal Type Ia SN 2003hv Out to Very Late Phases.”
- *88) M. C. Bentz, *et al.* (2009). *Astrophys. Jour.*, **705**, 199–213. “The Lick AGN Monitoring Project: Broad-Line Region Radii and Black Hole Masses from Reverberation Mapping of H β .”
- *89) J. L. Walsh, *et al.* (2009). *Astrophys. Jour. Supp. Ser.*, **185**, 156–170. “The Lick AGN Monitoring Project: Photometric Light Curves and Optical Variability Characteristics.”
- *90) A. Rau, *et al.* (2009). *Pub. Astron. Soc. Pacific*, **121**, 1334–1351. “Exploring the Optical Transient Sky with the Palomar Transient Factory.”
- *91) N. Law, *et al.* (2009). *Pub. Astron. Soc. Pacific*, **121**, 1395–1408. “The Palomar Transient Factory: System Overview, Performance, and First Results.”
- *92) D. Poznanski, *et al.* (2010). *Science*, **327**, 58–60. “An Unusually Fast-Evolving Supernova.”
- *93) G. Folatelli, *et al.* (2010). *Astron. Jour.*, **139**, 120–144. “The Carnegie Supernova Project: Analysis of the First Sample of Low-Redshift Type-Ia Supernovae.”
- *94) C. Contreras, *et al.* (2010). *Astron. Jour.*, **139**, 519–539. “The Carnegie Supernova Project: First Photometry Data Release of Type Ia Supernovae.”
- *95) N. Smith, R. Chornock, J. M. Silverman, A. V. Filippenko, and R. J. Foley (2010). *Astrophys. Jour.*, **709**, 856–883. “Spectral Evolution of the Extraordinary Type IIn Supernova 2006gy.”
- *96) R. Chornock, A. V. Filippenko, W. Li, and J. M. Silverman (2010). *Astrophys. Jour.*, **713**, 1363–1375. “Large Late-Time Asphericities in Three Type IIP Supernovae.”
- *97) N. Smith, *et al.* (2010). *Astron. Jour.*, **139**, 1451–1467. “Discovery of Precursor LBV Outbursts in Two Recent Optical Transients: The Fitfully Variable Missing Links UGC 2773-OT and SN 2009ip.”

- *98) N. Elias-Rosa, S. D. Van Dyk, W. Li, A. A. Miller, J. M. Silverman, M. Ganeshalingam, A. F. Boden, M. M. Kasliwal, J. Vinko, J.-C. Cuillandre, A. V. Filippenko, T. N. Steele, J. S. Bloom, C. V. Griffith, I. K. W. Kleiser, and R. J. Foley (2010). *Astrophys. Jour. (Letters)*, **714**, L254–L259. “The Massive Progenitor of the Type II-Linear Supernova 2009kr.”
- *99) H. B. Perets, *et al.* (2010). *Nature*, **465**, 322–325. “A Faint Type of Supernova from a White Dwarf with a Helium-Rich Companion.”
- *100) A. A. Miller, N. Smith, W. Li, J. S. Bloom, R. Chornock, A. V. Filippenko, and J. X. Prochaska (2010). *Astron. Jour.*, **139**, 2218–2229. “New Observations of the Very Luminous Supernova 2006gy: Evidence for Echoes.”
- *101) M. C. Bentz, *et al.* (2010). *Astrophys. Jour.*, **716**, 993–1011. “The Lick AGN Monitoring Project: Reverberation Mapping of Optical Hydrogen and Helium Recombination Lines.”
- *102) P. A. Milne, *et al.* (2010). *Astrophys. Jour.*, **721**, 1627–1655. “Near-Ultraviolet Properties of a Large Sample of Type Ia Supernovae as Observed with the Swift UVOT.”
- *103) M. Ganeshalingam, *et al.* (2010). *Astrophys. Jour. Supplement Ser.*, **190**, 418–448. “Results of the Lick Observatory Supernova Search Photometry Program: *BVRI* Light Curves of 165 Type Ia Supernovae.”
- *104) J. E. Greene, *et al.* (2010). *Astrophys. Jour.*, **723**, 409–416. “The Lick AGN Monitoring Project: Alternate Routes to a Broad-Line Region Radius.”
- *105) J. M. Silverman, M. Ganeshalingam, W. Li, A. V. Filippenko, A. A. Miller, and D. Poznanski (2011). *Mon. Not. Royal Astr. Soc.*, **410**, 585–611. “Fourteen Months of Observations of the Possible Super-Chandrasekhar Mass Type Ia Supernova 2009dc.”
- *106) D. Perley, *et al.* (2011). *Astron. Jour.*, **141**, ID 36. “Monster in the Dark: The Ultraluminous GRB 080607 and its Dusty Environment.”
- *107) J. Leaman, W. Li, R. Chornock, and A. V. Filippenko (2011). *Mon. Not. Royal Astr. Soc.*, **412**, 1419–1440. “Nearby Supernova Rates from the Lick Observatory Supernova Search. I. The Methods and Database.”
- *108) W. Li, J. Leaman, R. Chornock, A. V. Filippenko, D. Poznanski, M. Ganeshalingam, X. Wang, M. Modjaz, S. Jha, R. J. Foley, and N. Smith (2011). *Mon. Not. Royal Astr. Soc.*, **412**, 1441–1472. “Nearby Supernova Rates from the Lick Observatory Supernova Search. II. The Observed Luminosity Functions and Fractions of Supernovae in a Complete Sample.”
- *109) W. Li, R. Chornock, J. Leaman, A. V. Filippenko, D. Poznanski, X. Wang, M. Ganeshalingam, and F. Mannucci (2011). *Mon. Not. Royal Astr. Soc.*, **412**, 1473–1507. “Nearby Supernova Rates from the Lick Observatory Supernova Search. III. The Rate-Size Relation, and the Rates as a Function of Galaxy Hubble Type and Colour.”
- *110) D. Maoz, *et al.* (2011). *Mon. Not. Royal Astr. Soc.*, **412**, 1508–1521. “The Supernova Delay Function: Recovery Method and Application to the Lick Observatory Supernova Search.”
- *111) N. Smith, W. Li, A. V. Filippenko, and R. Chornock (2011). *Mon. Not. Royal Astr. Soc.*, **412**, 1522–1538. “Observed Fractions of Core-Collapse Supernova Types and Initial Masses of their Single and Binary Progenitor Stars.”
- *112) A. J. Barth, *et al.* (2011). *Astrophys. Jour.*, **732**, ID 121. “Broad-Line Reverberation in the *Kepler*-Field Seyfert Galaxy Zw 229-015.”
- *113) I. K. W. Kleiser, *et al.* (2011). *Mon. Not. Royal Astr. Soc.*, **415**, 372–382. “Peculiar Type II Supernovae from Blue Supergiants.”

- *114) N. Smith, W. Li, J. M. Silverman, M. Ganeshalingam, and A. V. Filippenko (2011). *Mon. Not. Royal Astr. Soc.*, **415**, 773–810. “Luminous Blue Variable Eruptions and Related Transients: Diversity of Progenitors and Outburst Properties.”
- *115) D. Poznanski, M. Ganeshalingam, J. M. Silverman, and A. V. Filippenko (2011). *Mon. Not. Royal Astr. Soc.*, **415**, L81–L84. “Low-Resolution Sodium D Absorption is a Bad Proxy for Extinction.”
- *116) A. Gal-Yam, *et al.* (2011). *Astrophys. Jour.*, **736**, ID 159. “Real-Time Detection and Rapid Multiwavelength Follow-up Observations of a Highly Subluminous Type II-P Supernova from the Palomar Transient Factory Survey.”
- *117) K. Krisciunas, *et al.* (2011). *Astron. Jour.*, **142**, ID 74. “The Most Slowly Declining Type Ia Supernova 2001ay.”
- *118) M. Ganeshalingam, W. Li, and A. V. Filippenko (2011). *Mon. Not. Royal Astr. Soc.*, **416**, 2607–2622. “The Rise-Time Distribution of Nearby Type Ia Supernovae.”
- *119) C. Guidorzi, *et al.* (2011). *Mon. Not. Royal Astr. Soc.*, **417**, 2124–2143. “A Faint Optical Flash in Dust-Obscured GRB 080603A: Implications for GRB Prompt Emission Mechanisms.”
- *120) S. D. Van Dyk, *et al.* (2011). *Astrophys. Jour. (Letters)*, **741**, ID L28. “The Progenitor of Supernova 2011dh/PTF11eon in Messier 51.”
- *121) A. J. Barth, *et al.* (2011). *Astrophys. Jour. (Letters)*, **743**, ID L4. “The Lick AGN Monitoring Project 2011: Reverberation Mapping of Markarian 50.”
- *122) A. Cucchiara, *et al.* (2011). *Astrophys. Jour.*, **743**, ID 154. “Constraining GRB Emission Physics with Extensive Early-Time, Multiband Follow-up”
- *123) W. Li, *et al.* (2011). *Nature*, **480**, 348–350. “Exclusion of a Luminous Red Giant as a Companion Star to the Progenitor of Supernova SN 2011fe.”
- *124) R. J. Foley, *et al.* (2012). *Astrophys. Jour.*, **744**, ID 38. “Very Early Ultraviolet and Optical Observations of the Type Ia Supernova 2009ig.”
- *125) O. M. Littlejohns, *et al.* (2012). *Mon. Not. Royal Astr. Soc.*, **421**, 2692–2712. “The Origin of the Early Time Optical Emission of Swift GRB 080310.”
- *126) M. Ganeshalingam, *et al.* (2012). *Astrophys. Jour.*, **751**, ID 142. “The Low-Velocity, Rapidly Fading Type Ia Supernova 2002es.”
- *127) M. M. Kasliwal, *et al.* (2012). *Astrophys. Jour.*, **755**, ID 161. “Calcium-rich Gap Transients in the Remote Outskirts of Galaxies.”
- *128) J. M. Silverman, *et al.* (2012). *Mon. Not. Royal Astron. Soc.*, **425**, 1789–1818. “Berkeley Supernova Ia Program I: Observations, Data Reduction, and Spectroscopic Sample of 582 Low-Redshift Type Ia Supernovae.”
- *129) J. M. Silverman, *et al.* (2012). *Astrophys. Jour. (Letters)*, **756**, ID 7. “The Very Young Type Ia Supernova 2012cg: Discovery and Early-Time Follow-Up Observations.”
- *130) S. Ben-Ami, *et al.* (2012). *Astrophys. Jour. (Letters)*, **760**, ID L33. “Discovery and Early Multi-Wavelength Measurements of the Energetic Type Ic Supernova PTF12gzk: A Massive-Star Explosion in a Dwarf Host Galaxy.”
- *131) E. Ofek, *et al.* (2013). *Astrophys. Jour.*, **763**, ID 42. “X-ray Emission from Supernovae in Dense Circumstellar Matter Environments: A Search for Collisionless Shocks.”
- *132) J. M. Silverman, M. Ganeshalingam, and A. V. Filippenko (2013). *Mon. Not. Royal Astron. Soc.*, **430**, 1030–1041. “Berkeley Supernova Ia Program – V: Late-Time Spectra of Type Ia Supernovae.”

- *133) J. C. Mauerhan, *et al.* (2013). *Mon. Not. Royal Astron. Soc.*, **430**, 1801–1810. “The Unprecedented 2012 Outburst of SN 2009ip: A Luminous Blue Variable Star Becomes a True Supernova.”
- *134) R. J. Foley, *et al.* (2013). *Astrophys. Jour.*, **767**, ID 57. “Type Iax Supernovae: A New Class of Stellar Explosion.”
- *135) M. C. Bentz, *et al.* (2013). *Astrophys. Jour.*, **767**, ID 149. “The Low-Luminosity End of the Radius–Luminosity Relationship for Active Galactic Nuclei.”
- *136) A. Furniss, *et al.* (2013). *Astrophys. Jour. (Letters)*, **768**, ID L31. “The Firm Redshift Lower Limit of the Most Distant TeV-detected Blazar PKS 1424+240.”
- *137) A. J. Barth, *et al.* (2013). *Astrophys. Jour.*, **769**, ID 128. “The Lick AGN Monitoring Project 2011: Fe II Reverberation from the Outer Broad-Line Region.”
- *138) M. Ganeshalingam, W. Li, & A. V. Filippenko (2013). *Mon. Not. Royal Astron. Soc.*, **433**, 2240–2258. “Constraints on Dark Energy with the LOSS SN Ia Sample.”
- *139) S. D. Van Dyk, W. Zheng, K. I. Clubb, A. V. Filippenko, C. B. Cenko, N. Smith, O. D. Fox, P. L. Kelly, I. Shavvish, and M. Ganeshalingam (2013). *Astrophys. Jour. (Letters)*, **772**, ID L32. “The Progenitor of Supernova 2011dh Has Vanished.”
- *140) M. R. Drout, *et al.* (2013). *Astrophys. Jour.*, **774**, ID 58. “The Fast and Furious Decay of the Peculiar Type Ic Supernova 2005ek.”
- *141) W. Zheng, *et al.* (2013). *Astrophys. Jour. (Letters)*, **778**, ID L15. “The Very Young Type Ia Supernova 2013dy: Discovery, and Strong Carbon Absorption in Early-time Spectra.”
- *142) F. J. Virgili, *et al.* (2013). *Astrophys. Jour.*, **778**, ID 54. “GRB 091024A and the Nature of Ultra-Long Gamma-Ray Bursts.”
- *143) M. S. Shaw, A. V. Filippenko, R. W. Romani, S. B. Cenko, & W. Li *Astron. Jour.*, **146**, ID 127. “Photometrically Triggered Keck Spectroscopy of Fermi BL Lacertae Objects.”
- *144) M. J. Childress, A. V. Filippenko, M. Ganeshalingam, and B. P. Schmidt (2014). *Mon. Not. Royal Astron. Soc.*, **437**, 338–350. “High-Velocity Features in Type Ia Supernova Spectra.”
- *145) D. A. Perley, *et al.* (2014). *Astrophys. Jour.*, **781**, 37. “The Afterglow of GRB 130427A from 1 to 10^{16} GHz.”
- *146) S. D. Van Dyk, *et al.* (2014). *Astron. Jour.*, **147**, 37. “The Type IIb Supernova 2013df and Its Cool Supergiant Progenitor.”
- *147) W. Zheng, *et al.* (2014). *Astrophys. Jour. (Letters)*, **783**, L24. “Estimating the First-Light Time of the Type Ia Supernova 2014J in M82.”
- *148) A. N. Morgan, *et al.* (2014). *Mon. Not. Royal Astron. Soc.*, **440**, 1810–1823. “Evidence for Dust Destruction from the Early-time Colour Change of GRB 120119A.”
- *149) T. Faran, *et al.* (2014). *Mon. Not. Royal Astron. Soc.*, **442**, 844–861. “Photometric and Spectroscopic Properties of Type II-P Supernovae.”
- *150) R. J. Foley, *et al.* (2014). *Mon. Not. Royal Astron. Soc.*, **443**, 2887–2906. “Extensive HST Ultraviolet Spectra and Multiwavelength Observations of SN 2014J in M82 Indicate Reddening and Circumstellar Scattering by Typical Dust.”
- *151) T. Faran, *et al.* (2014). *Mon. Not. Royal Astron. Soc.*, **445**, 554–569. “A Sample of Type II-L Supernovae.”
- *152) L. Pei, *et al.* (2014). *Astrophys. Jour.*, **795**, 38. “Reverberation Mapping of the KEPLER Field AGN KA1858+4850.”

- *153) K. Maguire, *et al.* (2014). *Mon. Not. Royal Astron. Soc.*, **444**, 3258–3274. “Exploring the Spectral Diversity of Low-Redshift Type Ia Supernovae Using the Palomar Transient Factory.”
- *154) M. Koss, *et al.* (2014). *Mon. Not. Royal Astron. Soc.*, **445**, 515–527. “SDSS1133: An Unusually Persistent Transient in a Nearby Dwarf Galaxy.”
- *155) D. P. Cohen, R. W. Romani, A. V. Filippenko, S. B. Cenko, B. Lott, W. Zheng, and W. Li (2014). *Astrophys. Jour.*, **797**, 137. “Temporal Correlations Between Optical and Gamma-ray Activity in Blazars.”
- *156) J. C. Mauerhan, *et al.* (2015). *Mon. Not. Royal Astron. Soc.*, **447**, 1922–1934. “SN Hunt 248: A Super-Eddington Outburst from a Massive Cool Hypergiant.”
- *157) P. L. Kelly, A. V. Filippenko, D. L. Burke, M. Hicken, M. Ganeshalingam, and W. Zheng (2015). *Science*, **347**, 1459–1462. “Distances with < 4% Precision from Type Ia Supernovae in Young Star-Forming Environments.”
- *158) C. Bilinski, N. Smith, W. Li, G. G. Williams, W. Zheng, and A. V. Filippenko (2015). *Mon. Not. Royal Astron. Soc.*, **450**, 246–265. “Constraints on Type IIn Supernova Progenitor Outbursts from the Lick Observatory Supernova Search.”
- *159) B. Poppe, T. Plaggenborg, W. Zheng, I. Shivvers, K. Itagaki, A. V. Filippenko, and J. Kunz-Drolshagen (2015). *Journal of the American Association of Variable Star Observers*, **43**, 43. “Early-Time Flux Measurements of SN 2014J Obtained with Small Robotic Telescopes: Extending the AAVSO Light Curve.”
- *160) Y.-C. Pan, *et al.* (2015). *Mon. Not. Royal Astron. Soc.*, **452**, 4307–4325. “500 Days of SN 2013dy: Spectra and Photometry from the Ultraviolet to the Infrared.”
- *161) N. L. Strotjohann, *et al.* (2015). *Astrophys. Jour.*, **811**, 117. “Search for Precursor Eruptions among Type IIb Supernovae.”
- *162) N. Smith, J. E. Andrews, J. C. Mauerhan, W. Zheng, A. V. Filippenko, M. L. Graham, P. Milne (2016). *Mon. Not. Royal Astron. Soc.*, **455**, 3546–3560. “The Persistent Eruption of UGC 2773-OT: Finally, a Decade-Long Extragalactic Eta Carinae Analog”
- *163) M. J. Valtonen, *et al.* (2016). *Astrophys. Jour. (Letters)*, **819**, L37. “Primary Black Hole Spin in OJ 287 as Determined by the General Relativity Centenary Flare.”
- *164) K. Zhang, *et al.* (2016). *Astrophys. Jour.*, **820**, 67. “Optical Observations of the Type Ia Supernova 2011fe in M101 for Nearly 500 Days.”
- *165) M. M. Fausnaugh, *et al.* (2016). *Astrophys. Jour.*, **821**, 56. “Space Telescope and Optical Reverberation Mapping Project. III. Optical Continuum Emission and Broad-Band Time Delays in NGC 5548.”
- *166) N. Smith, *et al.* (2016). *Mon. Not. Royal Astron. Soc.*, **458**, 950–962. “Massive-Star Mergers and the Recent Transient in NGC4490: A More Massive Cousin of V838 Mon and V1309 Sco.”
- *167) G. Dhungana, *et al.* (2016). *Astrophys. Jour.*, **822**, 6. “Extensive Spectroscopy and Photometry of the Type IIP Supernova 2013ej.”
- *168) G. Folatelli, *et al.* (2016). *Astrophys. Jour. (Letters)*, **825**, L22. “Disappearance of the Progenitor of Supernova iPTF13bvn.”
- *169) R. J. Foley, S. W. Jha, Y.-C. Pan, W. Zheng, L. Bildsten, A. V. Filippenko, and D. Kasen (2016). *Mon. Not. Royal Astron. Soc.*, **461**, 433–457. “Late-time Spectroscopy of Type Iax Supernovae.”
- *170) I. Shivvers, W. Zheng, J. Mauerhan, I. K. W. Kleiser, S. D. Van Dyk, J. M. Silverman, M. L. Graham, P. L. Kelly, A. V. Filippenko, and S. Kumar (2016). *Mon. Not. Royal*

- Astron. Soc.*, **461**, 3057–3074. “SN 2015U: A Rapidly Evolving and Luminous Type Ibn Supernova.”
- *171) D. A. Perley, R. Quimby, L. Yan, P. Vreeswijk, A. De Cia, R. Lunnan, A. Gal-Yam, O. Yaron, A. V. Filippenko, M. L. Graham, and P. E. Nugent (2016). *Astrophys. Jour.*, **830**, 13. “Host-Galaxy Properties of 32 Low-Redshift Superluminous Supernovae from the Palomar Transient Factory.”
 - 172) S. Zola, *et al.* (2016). In *Galaxies*, **4**, 41. “A Search for QPOs in the Blazar OJ287: Preliminary Results from the 2015/2016 Observing Campaign.”
 - *173) F. Huang, *et al.* (2016). *Astrophys. Jour.*, **832**, 139. “Optical and Ultraviolet Observations of the Very Young Type IIP SN 2014cx in NGC 337.”
 - *174) G. Hosseinzadeh, *et al.* (2017). *Astrophys. Jour.*, **836**, 158. “Type Ibn Supernovae Show Photometric Homogeneity and Spectral Diversity at Maximum Light.”
 - *175) O. Graur, F. B. Bianco, S. Huang, M. Modjaz, I. Shivvers, A. V. Filippenko, W. Li, and J. J. Eldridge (2017). *Astrophys. Jour.*, **837**, 120. “LOSS Revisited — I: Unraveling Correlations between Supernova Rates and Galaxy Properties, as Measured in a Re-analysis of the Lick Observatory Supernova Search.”
 - *176) O. Graur, F. Bianco, M. Modjaz, I. Shivvers, A. V. Filippenko, W. Li, and N. Smith (2017). *Astrophys. Jour.*, **837**, 121. “LOSS Revisited — II: Supernova Population Fractions Show a Deficiency of Type Ib and Ic, but not IIf, Supernovae in Low-Mass Galaxies.”
 - *177) I. Shivvers, *et al.* (2017). *Publ. Astron. Soc. Pacific*, **129**, 054201. “Revisiting the Lick Observatory Supernova Search Volume-limited Sample: Updated Classifications and Revised Stripped-envelope Supernova Fractions.”
 - *178) W. Zheng, *et al.* (2017). *Astrophys. Jour.*, **841**, 64. “Discovery and Follow-up Observations of the Young Type Ia Supernova 2016coj.”
 - *179) K. Krisciunas, *et al.* (2017). *Astron. Jour.*, **154**, 211 [Erratum: **154**, 278]. “The Carnegie Supernova Project, I. Third Photometry Data Release of Low-Redshift Type Ia Supernovae and Other White Dwarf Explosions.”
 - *180) I. Shivvers, *et al.* (2017). *Mon. Not. Royal Astron. Soc.*, **471**, 4381–4397. “The Nearby Type Ibn Supernova 2015G: Signatures of Asymmetry and Progenitor Constraints.”
 - *181) M. L. Graham, *et al.* (2017). *Mon. Not. Royal Astron. Soc.*, **472**, 3437–3454. “Nebular-Phase Spectra of Eight Nearby Type Ia Supernovae.”
 - *182) A. Pastorello, *et al.* (2018). *Mon. Not. Royal Astr. Soc.*, **474**, 197–218. “Supernovae 2016bdu and 2005gl, and Their Link with SN 2009ip-like Transients: Another Piece of the Puzzle.”
 - *183) M. Bersten, *et al.* (2018). *Nature*, **554**, 497. “A Surge of Light at the Birth of a Supernova.”
 - *184) M. D. Stritzinger, *et al.* (2018). *Astron. Astrophys.*, in press (arXiv:1707.07616). “The Carnegie Supernova Project I: Photometry Data Release of Low-Redshift Stripped-Envelope Supernovae.”
 - *185) C. Bullivant, *et al.* (2018). *Mon. Not. Royal Astron. Soc.*, in press. “SN 2013fs and SN 2013fr: Exploring the Circumstellar-Material Diversity in Type II Supernovae.”
 - *186) R. J. Foley, *et al.* (2018). *Mon. Not. Royal Astron. Soc.*, submitted. “Significant Luminosity Differences of Two Twin Type Ia Supernovae.”
 - *187) T. de Jaeger, *et al.* (2018). *Mon. Not. Royal Astron. Soc.*, submitted. “SN 2016esw: A Bright Type II Supernova Observed a Few Hours After the Explosion.”

- *188) I. Liodakis, R. W. Romani, A. V. Filippenko, T. Hovatta, S. Kiehlmann, W. Max-Moerbeck, and A. C. S. Readhead (2018). *Astrophys. Jour.*, submitted. “Multiwavelength Flaring Activity in Bright Blazars.”

In addition, there have been over 1600 *International Astronomical Union Circulars* reporting the KAIT discovery and follow-up observations of supernovae, over 130 *GCN Circulars* reporting KAIT imaging of gamma-ray burst optical afterglows, and dozens of conference Abstracts on KAIT results.