

NICHOLAS M. LAW
 Assistant Professor, Department of Physics and Astronomy
 University of North Carolina, Chapel Hill

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Department of Physics and Astronomy
 University of North Carolina at Chapel Hill
 Philips Hall, CB #3255
 120 E. Cameron Ave.

919-962-3019 (office)
 nmlaw@physics.unc.edu

Education	Ph.D., Astronomy , University of Cambridge, Cambridge, UK Thesis: Lucky Imaging: Diffraction-limited Astronomy from the Ground in the Visible. Advisor: Craig Mackay	Oct. 2003 – June 2006
	BA & MSci Physics , Selwyn College, University of Cambridge	Oct. 1999 – Oct. 2003
Professional experience	Assistant Professor , University of North Carolina at Chapel Hill Dunlap Fellow , Dunlap Institute, University of Toronto Postdoctoral Scholar in Astronomy , California Institute of Technology	Sep. 2013+ Sep. 2009 – Sep. 2013 July 2006 – Sep. 2009
Honors	2016: NSF CAREER award 2015: Scialog Fellowship 2009: Dunlap Postdoctoral Fellowship 2006: UK Particle Physics and Astronomy Research Council Studentship 2006: University of Cambridge: Selwyn Corfield Scholarship 2003: University of Cambridge: Selwyn Prize for Physics, Selwyn Tripos Prize	
Recent external grant awards	PI for “Evryscope Science: Realizing the Potential of the first full-sky gigapixel-scale telescope” <i>NSF CAREER AST-155175; \$914k</i>	Jan 2016 – Dec 2020
(\$2.01M as PI)	co-PI for “Linking the Evryscope with the AAVSO” <i>Scialog award #23822; \$100k, in collaboration w. J. Sokoloski (Columbia Univ)</i>	Jan 2016 – Dec. 2017
	co-PI for “Monitoring Extrasolar Space Weather with LWA and the Evryscope” <i>Scialog award #23782; \$100k, in collaboration w. G. Hallinan (Caltech)</i>	Jan 2016 – Dec. 2017
	PI for “The Robo-AO survey of Kepler exoplanet hosts” <i>NASA Exoplanet Research Program NNX15AC91G; \$437k</i> <i>Subcontracts to C. Baranec (Univ. Hawaii) & T. Morton (Princeton)</i>	Jan 2015 – Dec 2017
	PI for “The Evryscope: the first full-sky gigapixel-scale telescope” <i>NSF Advanced Technologies and Instrumentation AST-1407589; \$463k</i>	July 2014 – July 2016
Collaboration funding	Co-PI for the Northern Evryscope, a collaboration between San Diego State University (SDSU) and UNC. SDSU share: \$256k. UNC provides in-kind contributions and an externally-funded \$50k hardware contribution.	Feb 2017 – Feb 2020

External funding and honors awarded to members of my group	Carl Ziegler	Toronto Dunlap Postdoctoral Fellowship	Summer 2018+
	Hank Corbett	NSF Graduate Fellowship Project: “Evryscope Microlensing”	June 2017 – June 2020
	Carl Ziegler	North Carolina NASA Spacegrant Project: “Kepler Planet Characterization”	2017/18
	Ward Howard	North Carolina NASA Spacegrant, Project: “Stellar activity and planetary habitability”	2017/18
	Jeff Ratzloff	NSF Graduate Fellowship honorable mention Project: “Evryscope White Dwarfs”	April 2016

Publication List

96 refereed papers, 6000 total citations, 1110 citations to 1st-author papers. H-index 41.

Refereed papers	96. K2-140b - an eccentric 6.57 d transiting hot Jupiter in Virgo Giles, Bayliss, Espinoza and 25 co-authors <i>MNRAS 2018 475 1809G</i>
	95. Robo-AO Kepler Survey. IV. The Effect of Nearby Stars on 3857 Planetary Candidate Systems Ziegler, Law, Baranec and 7 co-authors. <i>AJ 2018 155 161Z</i>
	94. Laser-only Adaptive Optics Achieves Significant Image Quality Gains Compared to Seeing-limited Observations over the Entire Sky Howard, Law, Ziegler, Baranec, Riddle <i>AJ 2018 155 59H</i>
	93. Robo-AO Discovery and Basic Characterization of Wide Multiple Star Systems in the Pleiades, Praesepe, and NGC 2264 Clusters Hillenbrand, Zhang, Riddle, Baranec, Ziegler, Law, Stauffer <i>AJ 2018 155 51H</i>
	92. The Performance of the Robo-AO Laser Guide Star Adaptive Optics System at the Kitt Peak 2.1 m Telescope Jensen-Clem, Duev, Riddle, Salama, Baranec, Law, Kulkarni, Ramprakash <i>AJ 2018 155 32J</i>
	91. Neptune long-lived atmospheric features in 2013-2015 from small (28-cm) to large (10-m) telescopes Hueso, de Pater, Simon, and 32 co-authors <i>Icarus 2017 295 89H</i>
	90. Robo-AO Kepler Asteroseismic Survey. I. Adaptive Optics Imaging of 99 Asteroseismic Kepler Dwarfs and Subgiants Schonhut-Stasik, Baranec, Huber, Ziegler, Atkinson, Gaidos, Law, and 4 co-authors <i>ApJ 2017 847 97S</i>
	89. Magnetic Inflation and Stellar Mass. I. Revised Parameters for the Component Stars of the Kepler Low-mass Eclipsing Binary T-Cyg1-12664 Han, Muirhead, Swift, Baranec, Law, Riddle, Atkinson, Mace, DeFelippis <i>AJ 2017 154 100H</i>
	88. The Factory and the Beehive. III. PTFEB132.707+19.810, A Low-mass Eclipsing Binary in Praesepe Observed by PTF and K2 Kraus, Douglas, Mann, Agüeros, Law, and 8 co-authors <i>ApJ 2017 845 72K</i>
	87. Ultra-short-period Planets in K2 with Companions: A Double Transiting System for EPIC 220674823 Adams, Jackson, Endl and 10 co-authors <i>AJ 2017 153 82A</i>

Refereed papers (cont.)

86. Robo-AO Kepler Planetary Candidate Survey. III. Adaptive Optics Imaging of 1629 Kepler Exoplanet Candidate Host Stars
Ziegler, Law, Morton and 9 co-authors
AJ 2017 153 66Z
85. Probability of the Physical Association of 104 Blended Companions to Kepler Objects of Interest Using Visible and Near-infrared Adaptive Optics Photometry
Atkinson, Baranec, Ziegler, Law, Riddle, Morton
AJ 2017 153 25A
84. 197 Candidates and 104 Validated Planets in K2's First Five Fields
Crossfield, Ciardi, Petigura, and 41 co-authors
ApJS 2016 226 7C
83. Two Small Planets Transiting HD 3167
Vanderburg, Bieryla, Duev, and 10 co-authors
ApJ 2016 829L 9V
82. Five Planets Transiting a Ninth Magnitude Star
Vanderburg, Becker, Kristiansen, and 15 co-authors.
ApJ 827L 10V
81. Eleven Multiplanet Systems from K2 Campaigns 1 and 2 and the Masses of Two Hot Super-Earths
Sinukoff, Howard, Petigura, and 14 co-authors.
ApJ 2016 827L 78S
80. Robo-AO Kepler Planetary Candidate Survey. II. Adaptive Optics Imaging of 969 Kepler Exoplanet Candidate Host Stars
Baranec, Ziegler, Law, and 5 co-authors
AJ 2016 152 18B
79. Why Are Rapidly Rotating M Dwarfs in the Pleiades so (Infra)red?
Covey, Agüeros, Law, and 6 co-authors
ApJ 2016 822 81C
78. Two Small Temperate Planets Transiting Nearby M Dwarfs in K2 Campaigns 0 and 1
Schlieder, Crossfield, Petigura, and 20 co-authors.
ApJ 2016, 818, 87S
77. Planet Hunters. VIII. Characterization of 41 Long-period Exoplanet Candidates from Kepler Archival Data
Wang, Fischer, Barclay, and 29 co-authors.
ApJ 2015 815 127W
76. HII 2407: An Eclipsing Binary Revealed By K2 Observations of the Pleiades
Trevor, Stauffer, Hillenbrand, and 16 co-authors.
ApJ 2015, 814, 62D.
75. KELT-8b: A Highly Inflated Transiting Hot Jupiter and a New Technique for Extracting High-precision Radial Velocities from Noisy Spectra
Fulton, Collins, Gaudi, Stassun, Pepper, Beatty, Siverd, and 25 co-authors
ApJ 2015, 810...30F, 14 pgs.
74. High-speed Imaging and Wavefront Sensing with an Infrared Avalanche Photodiode Array
Baranec, Atkinson, Riddle, Hall, Jacobson, Law, Chun
ApJ 2015, 809...70B, 6 pgs.
73. Planets Around Low-mass Stars (PALMS). V. Age-dating Low-mass Companions to Members and Interlopers of Young Moving Groups
Bowler, Shkolnik, Liu, Schlieder, Mann, Dupuy, Hinkley, and 18 co-authors
ApJ 2015, 806...62B, 36 pgs.
72. Multiplicity of the Galactic Senior Citizens: A High-resolution Search for Cool Subdwarf Companions
Ziegler, Law, Baranec, Riddle, Fuchs
ApJ 2015, 804...30Z, 14 pgs.
71. Know the Star, Know the Planet. IV. A Stellar Companion to the Host Star of the Eccentric Exoplanet HD 8673b
Roberts, Mason, Neyman, Wu, Riddle, Shelton, Angione, and 25 co-authors
AJ 2015, 149..144R, 6 pgs.

Refereed papers (cont.)

70. Know the Star, Know the Planet. III. Late-Type Companions to Two Exoplanet Host Stars
Roberts, Tokovinin, Mason, Riddle, Hartkopf, Law, Baranec
AJ 2015, 149..118R, 7 pgs.
69. Evryscope Science: Exploring the Potential of All-Sky Gigapixel-Scale Telescopes
Law, Fors, Ratzloff, Wulfken, Kavanaugh, Sitar, Pruett, and 7 co-authors
PASP 2015, 127..234L, 16 pgs.
68. Characterizing the Cool KOIs. VII. Refined Physical Properties of the Transiting Brown Dwarf LHS 6343 C
Montet, Johnson, Muirhead, Villar, Vassallo, Baranec, Law, and 4 co-authors
ApJ 2015, 800..134M, 11 pgs.
67. Characterizing K2 Planet Discoveries: A Super-Earth Transiting the Bright K Dwarf HIP 116454
Vanderburg, Montet, Johnson, Buchhave, Zeng, Pepe, and 40 co-authors
ApJ 2015, 800...59V, 14 pgs.
66. An Ancient Extrasolar System with Five Sub-Earth-size Planets
Campante, Barclay, Swift, Huber, Adibekyan, Cochran, Burke, and 34 co-authors
ApJ 2015, 799..170C, 17 pgs.
65. A Survey of the High Order Multiplicity of Nearby Solar-type Stars with Robo-AO
Riddle, Tokovinin, Mason, Hartkopf, Roberts, Baranec, Law, and 8 co-authors
ApJ 2015, 799....4R, 21 pgs.
64. The Near-ultraviolet Luminosity Function of Young, Early M-type Dwarf Stars
Ansdell, Gaidos, Mann, Lépine, James, Buccino, Baranec, and 4 co-authors
ApJ 2015, 798...41A, 17 pgs.
63. Characterization of the Atmosphere of the Hot Jupiter HAT-P-32Ab and the M-dwarf Companion HAT-P-32B
Zhao, O'Rourke, Wright, Knutson, Burrows, Fortney, Ngo, and 9 co-authors
ApJ 2014, 796..115Z, 15 pgs.
62. The Factory and the Beehive. II. Activity and Rotation in Praesepe and the Hyades
Douglas, Agüeros, Covey, Bowsher, Bochanski, Cargile, Kraus, and 5 co-authors
ApJ 2014, 795..161D, 16 pgs.
61. Robotic Laser Adaptive Optics Imaging of 715 Kepler Exoplanet Candidates Using Robo-AO
Law, Morton, Baranec, Riddle, Ravichandran, Ziegler, Johnson, and 8 co-authors
ApJ 2014, 791...35L, 18 pgs.
60. IPAC Image Processing and Data Archiving for the Palomar Transient Factory
her, Surace, Grillmair, Ofek, Levitan, Sesar, van Eyken, and 22 co-authors
PASP 2014, 126..674L, 37 pgs.
59. Characterizing the Cool KOIs. VI. H- and K-band Spectra of Kepler M Dwarf Planet candidate Hosts
Muirhead, Becker, Feiden, Rojas-Ayala, Vanderburg, Price, Thorp, and 8 co-authors
ApJS 2014, 213....5M, 12 pgs.
58. High-efficiency Autonomous Laser Adaptive Optics
Baranec, Riddle, Law, Ramaprakash, Tendulkar, Hogstrom, Bui, and 6 co-authors
ApJ 2014, 790L...8B, 6 pgs.
57. First Searches for Optical Counterparts to Gravitational-wave Candidate Events
Aasi, Abadie, Abbott, Abbott, Abbott, Abernathy, Accadia, and 901 co-authors
ApJS 2014, 211....7A, 25 pgs.
56. An early and comprehensive millimetre and centimetre wave and X-ray study of SN2011dh: a non-equipartition blast wave expanding into a massive stellar wind
Horesh, Stockdale, Fox, Frail, Carpenter, Kulkarni, Ofek, and 20 co-authors
MNRAS 2013, 436.1258H, 9 pgs.
55. Millions of Multiples: Detecting and Characterizing Close-separation Binary Systems in Synoptic Sky Surveys
Terziev, Law, Arcavi, Baranec, Bloom, Bui, Burse, and 12 co-authors
ApJS 2013, 206...18T, 11 pgs.
54. Discovery of a Cosmological, Relativistic Outburst via its Rapidly Fading Optical Emission
Cenko, Kulkarni, Horesh, Corsi, Fox, Carpenter, Frail, and 22 co-authors
ApJ 2013, 769..130C, 16 pgs.

Refereed papers (cont.)

53. Characterizing the Cool KOIs. V. KOI-256: A Mutually Eclipsing Post-common Envelope Binary
Muirhead, Vanderburg, Shporer, Becker, Swift, Lloyd, Fuller, and 19 co-authors
ApJ 2013, 767..111M, 14 pgs.
52. Exoplanets from the Arctic: The First Wide-field Survey at 80°N
Law, Carlberg, Salbi, Ngan, Ahmadi, Steinbring, Murowinski, and 2 co-authors
AJ 2013, 145...58L, 11 pgs.
51. Bringing the Visible Universe into Focus with Robo-AO
Baranec, Riddle, Law, Ramaprakash, Tendulkar, Bui, Burse, and 9 co-authors
JVE 2013, .7250021B, 10 pgs.
50. Automatic Discovery and Classification of Transients & Variable Stars in the Synoptic Survey Era
Bloom, Richards, Nugent, Quimby, Kasliwal, Starr, Poznanski, and 6 co-authors
PASP 2012, 124.1175B, 22 pgs.
49. Hubble Space Telescope studies of low-redshift Type Ia supernovae: evolution with redshift and ultraviolet spectral trends
Maguire, Sullivan, Ellis, Nugent, Howell, Gal-Yam, Cooke, and 22 co-authors
MNRAS 2012, 426.2359M, 21 pgs.
48. Three New Eclipsing White-dwarf-M-dwarf Binaries Discovered in a Search for Transiting Planets around M-dwarfs
Law, Kraus, Street, Fulton, Hillenbrand, Shporer, Lister, and 20 co-authors
ApJ 2012, 757..133L, 14 pgs.
47. PTF 11kx: A Type Ia Supernova with a Symbiotic Nova Progenitor
Dilday, Howell, Cenko, Silverman, Nugent, Sullivan, Ben-Ami, and 28 co-authors
Science 2012, 337..942D, 4 pgs.
46. A new probe of the small-scale primordial power spectrum: Astrometric microlensing by ultracompact minihalos
Li, Erickcek, Law
PhRvD 2012, .86d3519L, 17 pgs.
45. The Palomar Transient Factory photometric catalog 1.0
Ofek, Laher, Surace, Levitan, Sesar, Horesh, Law, and 18 co-authors
PASP 2012, 124..854O, 7 pgs.
44. Calcium-rich Gap Transients in the Remote Outskirts of Galaxies
Kasliwal, Kulkarni, Gal-Yam, Nugent, Sullivan, Bildsten, Yaron, and 21 co-authors
ApJ 2012, 755..161K, 14 pgs.
43. The PTF Orion Project: A Possible Planet Transiting a T-Tauri Star
van Eyken, Ciardi, von Braun, Kane, Plavchan, Bender, Brown, and 31 co-authors
ApJ 2012, 755...42V, 14 pgs.
42. Aperture Photometry Tool Versus SExtractor for Noncrowded Fields
Laher, Rebull, Gorjian, Masci, Fowler, Grillmair, Surace, and 24 co-authors
PASP 2012, 124..764L, 18 pgs.
41. Aperture Photometry Tool
Laher, Gorjian, Rebull, Masci, Fowler, Helou, Kulkarni, and 1 co-author
PASP 2012, 124..737L, 27 pgs.
40. Analysis of the Early-time Optical Spectra of SN 2011fe in M101
Parrent, Howell, Friesen, Thomas, Fesen, Milisavljevic, Bianco, and 31 co-authors
ApJ 2012, 752L..26P, 7 pgs.
39. Classical Novae in Andromeda: Light Curves from PTF and GALEX
Cao, Kasliwal, Neill, Kulkarni, Lou, Ben-Ami, Bloom, and 6 co-authors
ApJ 2012, 752..133C, 17 pgs.
38. Asteroid rotation periods from the Palomar Transient Factory survey
Polishook, Ofek, Waszczak, Kulkarni, Gal-Yam, Aharonson, Laher, and 13 co-authors
MNRAS 2012, 421.2094P, 15 pgs.
37. A short-lived, luminous flare from the nuclear region of a star-forming galaxy
Cenko, Bloom, Kulkarni, Strubbe, Miller, Butler, Quimby, and 24 co-authors
MNRAS 2012, 420.2684C, 16 pgs.
36. Evidence for a Compact Wolf-Rayet Progenitor for the Type Ic Supernova PTF 10vgv
Corsi, Ofek, Gal-Yam, Frail, Poznanski, Mazzali, Kulkarni, and 18 co-authors
ApJ 2012, 747L...5C, 5 pgs.

Refereed papers (cont.)

35. SN 2010jp (PTF10aaxi): a jet in a Type II supernova
Smith, Cenko, Butler, Bloom, Kasliwal, Horesh, Kulkarni, and 14 co-authors
MNRAS 2012, 420.1135S, 10 pgs.
34. Early Radio and X-Ray Observations of the Youngest nearby Type Ia Supernova PTF 11kly
Horesh, Kulkarni, Fox, Carpenter, Kasliwal, Ofek, Quimby, and 16 co-authors
ApJ 2012, 746...21H, 8 pgs.
33. The Palomar Transient Factory Photometric Calibration
Ofek, Laher, Law, Surace, Levitan, Sesar, Horesh, and 16 co-authors
PASP 2012, 124...62O, 12 pgs.
32. Exclusion of a luminous red giant as a companion star to the progenitor of supernova SN 2011fe
Li, Bloom, Podsiadlowski, Miller, Cenko, Jha, Sullivan, and 22 co-authors
Nature 2011, 480..348L, 3 pgs.
31. Supernova SN 2011fe from an exploding carbon-oxygen white dwarf star
Nugent, Sullivan, Cenko, Thomas, Kasen, Howell, Bersier, and 32 co-authors
Nature 2011, 480..344N, 4 pgs.
30. PTF10ops - a subluminous, normal-width light curve Type-Ia SN in the middle of nowhere
Maguire, Sullivan, Thomas, Nugent, Howell, Gal-Yam, Arcavi, and 22 co-authors
MNRAS 2011, 418..747M, 12 pgs.
29. SN 2011dh: Discovery of a Type IIb SN from a Compact Progenitor in the Nearby Galaxy M51
Arcavi, Gal-Yam, Yaron, Sternberg, Rabinak, Waxman, Kasliwal, and 41 co-authors
ApJ 2011, 742L..18A, 7 pgs.
28. PTF 10bzf (SN 2010ah): A Broad-line Ic Supernova Discovered by the Palomar Transient Factory
Corsi, Ofek, Frail, Poznanski, Arcavi, Gal-Yam, Kulkarni, and 22 co-authors
ApJ 2011, 741...76C, 13 pgs.
27. The Factory and the Beehive. I. Rotation Periods for Low-mass Stars in Praesepe
Agüeros, Covey, Lemonias, Law, Kraus, Batalha, Bloom, and 7 co-authors
ApJ 2011, 740..110A, 12 pgs.
26. PTF1 J071912.13+485834.0: An Outbursting AM CVn System Discovered by a Synoptic Survey
Levitan, Fulton, Groot, Kulkarni, Ofek, Prince, Shporer, and 10 co-authors
ApJ 2011, 739...68L, 10 pgs.
25. Real-time Detection and Rapid Multiwavelength Follow-up Observations of a Highly Subluminous Type II-P Supernova from the Palomar Transient Factory Survey
Gal-Yam, Kasliwal, Arcavi, Green, Yaron, Ben-Ami, Xu, and 25 co-authors
ApJ 2011, 736..159G, 7 pgs.
24. The Palomar Transient Factory Orion Project: Eclipsing Binaries and YSOs
van Eyken, Ciardi, Rebull, Stauffer, Akeson, Beichman, Boden, and 21 co-authors
AJ 2011, 142...60V, 35 pgs.
23. An Extremely Luminous Panchromatic Outburst from the Nucleus of a Distant Galaxy
Levan, Tanvir, Cenko, Perley, Wiersema, Bloom, Fruchter, and 56 co-authors
Science 2011, 333..199L, 3 pgs.
22. Hydrogen-poor superluminous stellar explosions
Quimby, Kulkarni, Kasliwal, Gal-Yam, Arcavi, Sullivan, Nugent, and 20 co-authors
Nature 2011, 474..487Q, 3 pgs.
21. The Subluminous and Peculiar Type Ia Supernova PTF 09dav
Sullivan, Kasliwal, Nugent, Howell, Thomas, Ofek, Arcavi, and 13 co-authors
ApJ 2011, 732..118S, 13 pgs.
20. Galaxy Zoo Supernovae
Smith, Lynn, Sullivan, Lintott, Nugent, Botyanszki, Kasliwal, and 17 co-authors
MNRAS 2011, 412.1309S, 11 pgs.
19. PTF 10fqz: A Luminous Red Nova in the Spiral Galaxy Messier 99
Kasliwal, Kulkarni, Arcavi, Quimby, Ofek, Nugent, Jacobsen, and 35 co-authors
ApJ 2011, 730..134K, 11 pgs.
18. Evidence for an FU Orionis-like Outburst from a Classical T Tauri Star
Miller, Hillenbrand, Covey, Poznanski, Silverman, Kleiser, Rojas-Ayala, and 24 co-authors
ApJ 2011, 730...80M, 14 pgs.

Refereed papers (cont.)

17. Astrometric Microlensing by Local Dark Matter Subhalos
Erickcek & Law
ApJ 2011, 729...49E, 17 pgs.
16. Hubble Space Telescope Studies of Nearby Type Ia Supernovae: The Mean Maximum Light Ultraviolet Spectrum and its Dispersion
Cooke, Ellis, Sullivan, Nugent, Howell, Gal-Yam, Lidman, and 7 co-authors
ApJ 2011, 727L..35C, 5 pgs.
15. PTF10nvg: An Outbursting Class I Protostar in the Pelican/North American Nebula
Covey, Hillenbrand, Miller, Poznanski, Cenko, Silverman, Bloom, and 24 co-authors
AJ 2011, 141...40C, 17 pgs.
14. Two Wide Planetary-mass Companions to Solar-type Stars in Upper Scorpius
Ireland, Kraus, Martinache, Law, Hillenbrand
ApJ 2011, 726..113I, 11 pgs.
13. Supernova PTF 09UJ: A Possible Shock Breakout from a Dense Circumstellar Wind
Ofek, Rabinak, Neill, Arcavi, Cenko, Waxman, Kulkarni, and 25 co-authors
ApJ 2010, 724.1396O, 6 pgs.
12. Rapidly Decaying Supernova 2010X: A Candidate ".Ia" Explosion
Kasliwal, Kulkarni, Gal-Yam, Yaron, Quimby, Ofek, Nugent, and 29 co-authors
ApJ 2010, 723L..98K, 5 pgs.
11. A High-Contrast Imaging Survey of SIM Lite Planet Search Targets
Tanner, Gelino, Law
PASP 2010, 122.1195T, 12 pgs.
10. Core-collapse Supernovae from the Palomar Transient Factory
Arcavi, Gal-Yam, Kasliwal, Quimby, Ofek, Kulkarni, Nugent, and 22 co-authors
ApJ 2010, 721..777A, 8 pgs.
9. The High-order Multiplicity of Unusually Wide M Dwarf Binaries: Eleven New Triple and Quadruple Systems
Law, Dhital, Kraus, Stassun, West
ApJ 2010, 720.1727L, 11 pgs.
8. The Palomar Transient Factory: System Overview, Performance, and First Results
Law, Kulkarni, Dekany, Ofek, Quimby, Nugent, Surace, and 34 co-authors
PASP 2009, 121.1395L, 14 pgs.
7. Exploring the Optical Transient Sky with the Palomar Transient Factory
Rau, Kulkarni, Law, Bloom, Ciardi, Djorgovski, Fox, and 17 co-authors
PASP 2009, 121.1334R, 18 pgs.
6. Getting Lucky with Adaptive Optics: Fast Adaptive Optics Image Selection in the Visible with a Large Telescope
Law, Mackay, Dekany, Ireland, Lloyd, Moore, Robertson, and 2 co-authors
ApJ 2009, 692..924L, 7 pgs.
5. The LuckyCam survey for very low mass binaries - II. 13 new M4.5-M6.0 binaries
Law, Hodgkin & Mackay
MNRAS 2008, 384..150L, 11 pgs.
4. Taking the Measure of the Universe: Precision Astrometry with SIM PlanetQuest
Unwin, Shao, Tanner, Allen, Beichman, Boboltz, Catanzarite, and 29 co-authors
PASP 2008, 120...38U, 51 pgs.
3. Discovery of five VLM close binaries, resolved in the visible with lucky imaging
Law, Hodgkin & Mackay
MNRAS 2006, 368.1917L, 8 pgs.
2. Lucky imaging: high angular resolution imaging in the visible from the ground
Law, Mackay & Baldwin
A&A 2006, 446..739L, 7 pgs.
1. A search for X-ray flashes with XMM-Newton
Law, Rutledge & Kulkarni
MNRAS 2004, 350.1079L, 8 pgs.

Selected SPIE proceedings

(24 total)

16. Evryscope Robotilter automated camera / ccd alignment system
Ratzloff, Law, Fors, del Ser, Corbett
2016 SPIE 9908E oWR
15. SRAO: the first southern robotic AO system
Law, Ziegler, Tokovinin
2016 SPIE 9907E oKL
14. The Evryscope: design and performance of the first full-sky gigapixel-scale telescope
Law, Fors, Ratzloff, Corbett, del Ser, Wulfken
2016 SPIE 9906E 1ML
13. The Robo-AO KOI survey: laser adaptive optics imaging of every Kepler exoplanet candidate
Ziegler, Law, Baranec and 4 co-authors
2016 SPIE 9909E 5UZ
12. SRAO: optical design and the dual-knife-edge WFS
Ziegler, Law, Tokovinin
2016 SPIE 9909E 3ZZ
11. Second generation Robo-AO instruments and systems
Baranec, Riddle, Law, Chun, Lu, Connelley, Hall, and 2 co-authors
SPIE 2014, 9148E..12B, 11 pgs.
10. Twelve thousand laser-AO observations: first results from the Robo-AO large surveys
Law, Baranec, Riddle
SPIE 2014, 9148E..0AL, 9 pgs.
9. Optical turbulence profiling with SloDAR in the Canadian High Arctic
Maire, Mieda, Steinbring, Murowinski, Graham, Carlberg, Wright, and 2 co-authors
SPIE 2014, 9145E..3JM, 8 pgs.
8. The Evryscope: the first full-sky gigapixel-scale telescope
Law, Fors, Wulfken, Ratzloff, Kavanaugh
SPIE 2014, 9145E..0ZL, 9 pgs.
7. New results from the first exoplanet survey in the Canadian High Arctic
Law, Carlberg, Fors, Steinbring, Ngan, Wulfken, Pedersen, and 2 co-authors
SPIE 2014, 9145E..0HL, 9 pgs.
6. Characterizing near-infrared sky brightness in the Canadian high arctic
Sivanandam, Graham, Abraham, Tekatch, Steinbring, Ngan, Welch, Carlberg, Law
SPIE 2012, 8446E..43S, 12 pgs.
5. New Exoplanet Surveys in the Canadian High Arctic at 80 Degrees North
Law, Sivanandam, Murowinski, Carlberg, Ngan, Salbi, Ahmadi, and 3 co-authors
SPIE 2012, 8444E..5CL, 10 pgs.
4. The Robo-AO software: fully autonomous operation of an LGS AO and science system
Riddle, Burse, Law, Tendulkar, Baranec, Rudy, Sitt, and 4 co-authors
SPIE 2012, 8447E..2OR, 9 pgs.
3. Robo-AO: autonomous and replicable laser-adaptive-optics and science system
Baranec, Riddle, Ramaprakash, Law, Tendulkar, Kulkarni, Dekany, and 7 co-authors
SPIE 2012, 8447E..04B, 11 pgs.
2. The Palomar Transient Factory Survey Camera: first year performance and results
Law, Dekany, Rahmer, Hale, Smith, Quimby, Ofek, and 15 co-authors
SPIE 2010, 7735E..3ML, 8 pgs.
1. Getting lucky with adaptive optics: diffraction-limited resolution in the visible with current AO systems on large and small telescopes
Law, Dekany, Mackay, Moore, Britton, Velur
SPIE 2008, 7015E..2IL, 11 pgs.

Students and Teaching

Courses Taught	Fall 2017: ASTR-519 & ASTR-719, UNC Chapel Hill (6 students). Spring 2017: ASTR-519 & ASTR-719, UNC Chapel Hill (15 students). Spring 2016: ASTR-101, UNC Chapel Hill (168 students). Fall 2015: ASTR-519 & ASTR-719, UNC Chapel Hill (22 students). Spring 2015: ASTR 101, UNC Chapel Hill (245 students). Fall 2014: ASTR-519 & ASTR-719, UNC Chapel Hill (9 students). Spring 2014: ASTR 101, UNC Chapel Hill (182 students).
Courses Developed	ASTR-519 & 719 (new design of existing course, from scratch) ASTR-502: Astronomy in the era of big data (CURE course; \$16k of competitive UNC funding)
Current graduate students	Carl Ziegler (5th year, passed defense, graduating summer 2018) Jeffrey Ratzloff (4th year; passed prelim spring 2018) Ward Howard (3rd year) Hank Corbett (2nd year) Amy Glazier (1st year)
Graduated students	Phillip Wulfken (graduated with masters in 2016)
Postdoctoral Scholar	Octavi Fors (March 2014 – December 2017; moved to a position at Univ. Barcelona)
Conference presentations given by members of my group	<p>Ward Howard Stellar activity for Every TESS star in the Southern sky, AAS 231 2018 (talk) Stellar Activity for Every TESS Star in the Southern sky, NExSci Know Thy Star, 2017 (poster) Stellar Activity for Every TESS Star in the Southern sky, NCAM, 2017 (talk) EvryFlare: Flare rates for every star in the Southern sky, Planetary Habitability, 2017 (poster) Faint Kepler Objects of Interest with Adaptive Optics and no Guidestar, NCAM, 2016 (talk)</p> <p>Carl Ziegler Robo-AO KOI Survey: LGS-AO imaging of every Kepler candidate host, AAS 231, 2018 (talk) High resolution imaging of 4000 KOIs, Know Thy Star, Know Thy Planet, 2017 (talk) Robo-AO KOI Survey: LGS-AO imaging of every KOI, Transiting Exoplanets, 2017 (talk) Robo-AO and a Southern robotic AO system, IoA, University of Hawaii, 2016 (invited colloquium) Adaptive Optics Imaging of Kepler Planetary Candidates, NCAM, 2016 (talk) The Robo-AO KOI Survey: Laser Adaptive Optics Imaging of Every KOI, AAS 227, 2016 (talk) Robo-AO KOI Survey: Robotic LGS-AO Imaging of Every KOI, Kepler SciCon IV, 2017 (poster) SRAO: the first southern robotic AO system, SPIE Astronomical Telescopes, 2016 (poster) The Robo-AO KOI survey: AO imaging of every KOI, SPIE Astronomical Telescopes, 2016 (poster) Multiplicity of the Galactic Senior Citizens: A search for subdwarf binaries, AAS225, 2015 (poster)</p> <p>Hank Corbett Rapid all-sky transient discovery and analysis with Evryscope, AAS 231, 2018 (talk) Near-field Microlensing with Evryscop, Microlensing 2017 (poster) Evryscope: The Data Analysis Pipeline, NCAM, 2016 (talk)</p> <p>Jeff Ratzloff Precision camera alignment for the Evryscope, SPIE Astronomical Telescopes, 2016 (talk)</p>
Undergraduate research projects	<p>2017-18: Erin Goeke (PHY295; Evryscope machine learning, paid undergraduate researcher) Aaron Pietraallo (PHY395; Evryscope stellar activity search)</p> <p>2017: Erin Conn (PHY395; Evryscope solar-type-star planet search) Mark Tierney (PHY395; Robo-AO nearby-star survey)</p> <p>2016: Sheridan Green (PHY 395; 2nd-gen Evryscope cameras)</p> <p>2015: Drew Smith (PHY-395; finding exoplanets in PTF-SNe data) Sarah Roberts (applying systematics-removal techniques to Arctic-camera data) Ward Howard (incoming grad student; LGS-AO without a tip/tilt guide star) Hark Corbett (parallel Evryscope image calibration)</p> <p>2014: Bjorn Pederson (PHYS482L: Arctic sky brightness and cloud cover) Julie Wellons (PHYS482L: stellar populations in the PTF/M-dwarfs survey) Jeff Ratzloff (incoming grad student; Evryscope mechanical design) Dustin Kavanaugh (uncredited independent study: planetary detection efficiency) Dustin Kavanaugh (summer research; Evryscope camera placement)</p>

Professional Service, Talks, and Outreach

Professional service SOAR2020 workshop science organizing committee (2016/7)
 SRK@60 workshop instrumentation session chair (2016)
 TESS (NASA exoplanet mission) followup program working group member (2017+)
 TESS (NASA exoplanet mission) target selection working group member (2015+)
 NSF grant panel reviewer (multiple panels)
 NSF grant external reviewer
 NASA grant review panel member (2013)
 Referee for the Astrophysical Journal (ApJ), the Astronomical Journal (AJ), Monthly Notices of the Royal Astronomical Society (MNRAS) and Publications of the Astronomical Society of the Pacific (PASP)
 Referee for BSF (US-Israel Binational Science Foundation) grants
 Referee for CANTAC (Canadian Gemini time allocation committee)

Recent professional talks UNC's Evryscopes: Watchful Eyes on the Entire Sky (invited talk)
UNC Board of Trustees, Chapel Hill, 2018
 Evryscope and CAREER Science and Education (invited talk)
NSF Fellows Symposium, Washington D.C., 2018
 Evryscope: the first gigapixel-scale all-sky telescope (invited colloquium)
University of Maryland, Department of Astronomy, 2017
 Evryscope: the first gigapixel-scale all-sky telescope (invited colloquium)
 North Carolina State University, Department of Physics, 2017
 Evryscope-North: SDSU and UNC monitoring the sky together (invited colloquium)
San Diego State University, Department of Astronomy, 2017
 Robots Exploring the Habitable Sky: Robo-AO and Evryscope (invited talk)
Institute for Advanced Study, Princeton University, 2017
 Optical and Infrared Telescope Basics (invited talk)
University of Toronto, Dunlap Summer School, 2017
 Evryscope: the first gigapixel-scale all-sky telescope (invited colloquium)
Argonne National Laboratory, Physics Division, 2017
 Evryscope: the first gigapixel-scale all-sky telescope (invited colloquium)
Wake Forest University, Department of Physics, 2017
 Evryscope: the first gigapixel-scale all-sky telescope (invited colloquium)
University of Notre Dame, Department of Physics, 2016
 AAVSO and Evryscope: professional / amateur collaborations (invited talk)
Scialog Time-Domain Fellows workshop, 2016
 Stellar flares and planetary habitability with the Evryscope & LWA (invited talk)
Scialog Time-Domain Fellows workshop, 2016
 Building the Evryscope high-cadence survey of the whole sky (invited talk)
SRK@60 workshop: Compact, Cataclysmic and Catastrophic, 2016
 SRAO: the first southern robotic AO system
SPIE Astronomical Telescopes and Instrumentation, 2016
 The Evryscope: design and performance of the first full-sky gigapixel-scale telescope
SPIE Astronomical Telescopes and Instrumentation, 2016
 Following-up TESS Exoplanets with Robo-AO (invited talk)
TESS Science Team Meeting, MIT, 2015
 Evryscope: the first gigapixel-scale all-sky telescope (invited talk)
Caltech Small Telescope Sky Surveys Workshop, 2015
 Monitoring the entire Antarctic sky, all the time (invited talk)
Scientific Committee on Antarctic Research, Astronomy Workshop, 2015
 Laser-AO imaging of every Kepler Planet Candidate
IAU General Assembly, 2015
 The Evryscope: the first gigapixel-scale all-sky telescope (invited colloquium)
Las Cumbres Global Observatory, 2015
 The Evryscope: the first gigapixel-scale all-sky telescope
American Astronomical Society Winter Conference, 2015
 The Evryscope: the first gigapixel-scale all-sky telescope (invited colloquium)
Caltech Astronomy Department, 2014
 12,000 Adaptive Optics observations: Robo-AO science
SPIE Astronomical Telescopes and Instrumentation, 2014
 Results from the first exoplanet survey at the North Pole
SPIE Astronomical Telescopes and Instrumentation, 2014
 The Evryscope: the first gigapixel-scale all-sky telescope
SPIE Astronomical Telescopes and Instrumentation, 2014

Recent professional talks (cont.)

- Robots with Lasers and an Arctic Adventure (invited colloquium)
University of Washington Astronomy Dept. 2013
- Detecting Exoplanets with a New Generation of Sky Surveys (invited colloquium)
UNC Chapel Hill Department of Physics & Astronomy, 2013
- Detecting Exoplanets with a New Generation of Sky Surveys (invited colloquium)
University of Toronto Department of Astronomy, 2013
- Detecting Exoplanets with a New Generation of Sky Surveys (invited colloquium)
University of Hawaii Institute of Astronomy, 2013
- High-speed astronomy (invited colloquium)
U. Hawaii Institute of Astronomy Hilo, 2013
- Cool Stars, Cool Planets, and Arctic Astronomy (invited colloquium)
Dalhousie University, 2012
- Finding Exoplanets in the High Canadian Arctic (invited colloquium)
York University, 2012
- Cool Planets, Cool Stars, and Frigid Astronomy (invited colloquium)
University of British Columbia., 2012
- Cool Planets, Cool Stars, and Frigid Astronomy (invited colloquium)
Columbia University, 2012
- Astronomy in the Canadian Arctic (invited colloquium)
University of Waterloo, 2012

Public Outreach & Media Coverage**Evryscope (PI):**

Evryscope discovery of a superflare from Proxima Centauri covered in Forbes, Popular Mechanics, New Scientist, El Pais, space.com, Ars Technica, and a variety of other outlets worldwide.

Popular Mechanics named the Evryscope as #2 of 50 technological innovations in their "Year of Good Things 2015" issue.

Covered in a variety of other publications including MIT Technology Review, Sky & Telescope, Science (full-page feature article), Science News, etc.

Developing methods of displaying Evryscope data in realtime on planetarium domes (NSF funded; in collaboration with Morehead Planetarium)

SOAR-AO (PI):

Robo-AO & ongoing adaptive optics programs were featured in a Nature News & Views article. SOAR-AO plans were covered in the Daily Tar Heel and other local outlets.

DI Arctic Telescope (PI):

profiled in the Montreal Gazette and several other newspapers

PTF (Project Scientist):

featured in a wide variety of national and international media, for discoveries ranging from a star falling into a supermassive black hole, to a new class of superluminous supernovae.

LAMP Lucky+AO instrument at Palomar (PI):

One of Time Magazine's Best Inventions of 2007.

The project was also covered in Nature, New Scientist, Discover, Slashdot, etc., as well as producing an ApJ paper and six SPIE papers.

Recent Public Talks

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| Astronomy on Tap, Durham | March 2018 |
| Chapel Hill Astronomy Club | May 2016 |
| Asheville Astronomy Club | May 2016 |
| Morehead Teen Science Cafe | April 2016 |
| Raleigh Astronomy Club: exoplanets | Nov 2015 |
| UNC Humanities program: Exoplanets and a North Pole Adventure | Sep. 2014 |
| UNC SHAPE program: Exoplanets, Digital Cameras, and a North Pole Adventure | May 2014 |