

## Biographical Sketch of L. Wang

### Appointments

Professor	2015 -	Physics and Astronomy, Texas A&M Univ.
Asso. Professor	2006-2015	Physics and Astronomy, Texas A&M Univ.
Adjunct Researcher	2006-	Purple Mountain Observatory, Nanjing, China
Adjunct Faculty	2006-2008	Lawrence Livermore National Laboratory
Physicist	2000-2006	Lawrence Berkeley National Laboratory
Research Scientist	1996-2000	Dept. of Astronomy, Univ. of Texas at Austin
Hubble Fellow	1995-1996	Dept. of Astronomy, Univ. of Texas at Austin
Post-doctoral Fellow	1994-1996	Dept. of Astronomy, Univ. of Texas at Austin

### Professional Preparation

University of Sci. and Tech. of China	Hefei, China	Electric Engr.	BE 1986
University of Sci. and Tech. of China	Hefei, China	Astronomy	PhD 1993

### Publications

#### i. Five publications most closely related to the proposed project

1. Yang, Y., Wang, L., Baade, D., Brown, P. J., Cracraft, M., Höflich, P. A., Maund, J., Patat, F., Sparks, W. B., Spyromilio, J., Wang, X., & Wheeler, J. C. 2016, Interstellar Medium Mapping in M82 Through Light Echoes Around Supernova 2014J, *ApJ*, in press
2. Wang, L., and Wheeler, J. C. 2008, Spectropolarimetry of Supernovae, *ARA&A*, 46, 433
3. Wang, L., Baade, D., & Patat, F. 2006, Polarimetry Diagnostics of Thermonuclear Explosions, *Science*, 315. 5809, 212 - 214
4. Wang, X., Wang, L., Filippenko, A. V., and 90 coauthors 2012, Evidence for Type Ia Diversity from Ultraviolet Observations with the Hubble Space Telescope, *ApJ*, 791, 126
5. Wang, L. 2005, Dust around Type Ia Supernovae, *ApJ*, 635 L33

#### ii. Five other significant publications

1. Baron, E., P. Hoeflich, B. Friesen, M. Sullivan, E. Hsiao, R. S. Ellis, A. Gal-Yam, D. A. Howell, P. E. Nugent, I. Dominguez, K. Krisciunas, M. M. Phillips, N. Suntzeff, L. Wang, and R. C. Thomas, 2015, Spectral models for early time SN 2011fe observations. *MNRAS*, 454, 2549-2556.
2. Patat, F., Taubenberger, S., Cox, N. L. J., Baade, D., Clocchiatti, A.; Hoeflich, P., Maund, J. R., Reilly, E.; Spyromilio, J., Wang, L., Wheeler, J. C., Zelaya, P. 2015, Properties of extragalactic dust inferred from linear polarimetry of Type Ia Supernovae, *A&A*, 577, 53
3. Brown, Peter J., Smitka, Michael T., Wang, Lifan, Breeveld, Alice, de Pasquale, Massimiliano, Hartmann, Dieter H., Krisciunas, Kevin, Kuin, N. Paul, Milne, Peter A., Page, Mat, Siegel, Michael, 2015, Swift Ultraviolet Observations of Supernova 2014J in M82: Large Extinction from Interstellar Dust, *ApJ*, 805, 74
4. Wang, Lingzhi, Macri, L., Krisciunas, K., Wang, L., and 17 coauthors 2011, Photometry of Variable Stars from Dome A, Antarctica, *AJ*, 142, 155

5. Wang, L., Goldhaber, G., Aldering, G., Perlmutter, S. 2003, Multicolor Light Curves of Type Ia Supernovae on the Color-Magnitude Diagram: A Novel Step toward More Precise Distance and Extinction Estimates, *ApJ*, 644, 1

### **Synergistic activities**

1. LW initiated the program of spectropolarimetry observations as a postdoc in 1994 and later a Hubble Fellow in 1995 at UT Austin. The polarimetry method developed in this long-term program has now become one of the most important observational techniques of supernova observation, especially when probing the 3-D structures of SN ejecta.
2. LW developed the Color-MAGnitude Intercept Calibration (CMAGIC) method for cosmological applications of Type Ia supernovae, and is active in cosmological applications of supernovae. He was a member of the Supernova Cosmology Project led Saul Perlmutter at LBNL who was awarded Nobel Prize on Physics in 2011.
3. LW is the first to recognize the existence of circumstellar dust around SNIa may explain the peculiar dust extinction properties toward Type Ia supernovae.
4. LW led an international team on a high profile astronomical site survey program during the International Polar Year (IPY) in 2007-2008 that established Dome A, Antarctica as a superb site with free atmospheric seeing  $\sim 0.3$  arcsec. He is the PI of the CSTAR and AST3 projects at Dome A, Antarctica which opened the field of high-cadence long-duration time-domain astronomy from Antarctica.