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EMPLOYMENT:

- (CURRENT POSITION) CALIFORNIA INSTITUTE OF TECHNOLOGY,
INFRARED PROCESSING AND ANALYSIS CENTER (IPAC),
Postdoctoral Scholar, 2008 – Present
- OHIO STATE UNIVERSITY, DEPARTMENT OF ASTRONOMY,
Presidential Graduate Fellow, 2008
- OHIO STATE UNIVERSITY, DEPARTMENT OF ASTRONOMY,
Graduate Research/Teaching Assistant, 2002 – 2007
- REPUBLIC OF KOREA AIR FORCE,
1999 – 2002, retired as a 1st Lieutenant

ACADEMIC DEGREES:

- THE OHIO STATE UNIVERSITY, DEPARTMENT OF ASTRONOMY, 2002 – 2008
Ph. D., August 2008
“Improving the Local Distance Scale from Empirically Calibrated Stellar Isochrones”
Dissertation Committee:
Profs. Donald M. Terndrup (adviser), Marc H. Pinsonneault, Jennifer A. Johnson
- YONSEI UNIVERSITY, Seoul, Korea, 1995 – 1999
B. A. in Astronomy, February 1999

PRINCIPLE RESEARCH ACTIVITIES:

- Star formation in the Galactic Center
- Formation and evolution of the Galactic Halo
- Cosmic distance scale
- Observational constraints on theoretical stellar models

AWARDS AND FELLOWSHIPS:

- Young SDSS Astronomer Travel Assistance Award,
ASTROPHYSICAL RESEARCH CONSORTIUM, SLOAN DIGITAL SKY SURVEY, 2008
- Presidential Fellowship,
THE OHIO STATE UNIVERSITY, 2008
- Allan Markowitz Graduate Award for Excellence in Observational Astronomy,
THE OHIO STATE UNIVERSITY, 2007
- University Scholarship,
YONSEI UNIVERSITY, Seoul, Korea, 1997 & 1998

PROFESSIONAL SOCIETIES:

- American Astronomical Society, 2006 – Present

PUBLIC SERVICE:

- Planetarium presentations for Columbus middle and high school students, 2006 – 2007

MEDIA APPEARANCE:

- Discovery of Massive Young Stellar Objects in the Galactic Center, 2009
<http://www.spitzer.caltech.edu/Media/releases/ssc2009-13/release.shtml>
- Discovery of “Icy Super Earth”, 2006
<http://researchnews.osu.edu/archive/suprerth.htm>

REFERENCES:

Local distance scale, cluster properties, SDSS, graduate work:

- *Donald M. Terndrup, Associate Professor*
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Young stellar objects in the Galactic Center using *Spitzer* IRS:

- *Solange V. Ramirez, Staff Scientist*
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REFEREED JOURNAL ARTICLES (MOST RECENTER FIRST):

1. An, D., Johnson, J. A., Beers, T. C., Pinsonneault, M. H., Terndrup, D. M., Delahaye, F., Lee, Y. S., Masseron, T., Yanny, B., “A Photometric Metallicity Estimate of the Virgo Stellar Overdensity,” *submitted to the Astrophysical Journal Letter*.
2. An, D., Ramirez, S. V., Sellgren, K., Arendt, R. G., Boogert, A. C. A., Cotera, A. S., Robitaille, T. P., Schultheis, M., Smith, H. A., Stolovy, S. R., “First Spectroscopic Identification of Massive Young Stellar Objects in the Galactic Center,” *submitted to the Astrophysical Journal Letter*.
3. An, D., Pinsonneault, M. H., Masseron, T., Delahaye, F., Johnson, J. A., Terndrup, D. M., Beers, T. C., Ivans, I. I., Ivezić, Z., “Galactic Globular and Open Clusters in the Sloan Digital Sky Survey. II. Test of Theoretical Stellar Isochrones,” *Astrophysical Journal*, 700, 523 (2009).
4. Abazajian, K, and for the Sloan Digital Sky Survey (including An, D.), “The Seventh Release of Sloan Digital Sky Survey,” *Astrophysical Journal Supplement*, 182, 543 (2009).
5. Yanny, B., Rockosi, C., et al. (SEGUE collaboration including An, D.), “SEGUE: A Spectroscopic Survey of 240,000 Stars with $g=14-20$,” *Astronomical Journal*, 137, 4377 (2009).
6. An, D., Johnson, J. A., Clem, J. L., Yanny, B., Rockosi, C. M., Morrison, H. L., Harding, P., Gunn, J. E., Allende Prieto, C., Beers, T. C., Cudworth, K. M., Ivans, I. I., Ivezić, Z., Lee, Y. S., Lupton, R. H., Bizyaev, D., Brewington, H., Malanushenko, E., Malanushenko, V., Oravetz, D., Pan, K., Simmons, A., Snedden, S., Watters, S., York, D. G., “Galactic Globular and Open Clusters in the Sloan Digital Sky Survey. I. Crowded Field Photometry and Cluster Fiducial Sequences in *ugriz*,” *Astrophysical Journal Supplement*, 179, 326 (2008).
7. Lee, Y. S., Beers, T. C., Sivarani, T., Johnson, J. A., An, D., Wilhelm, R., Allende Prieto, C., Fiorentin, P. R., Bailer-Jones, C. A., Norris, J. E., Yanny, B., Rockosi, C., Newberg, H. J., Cudworth, K. M., Pan, K., “The SEGUE Stellar Parameter Pipeline. II. Validation with Galactic Globular and Open Clusters,” *Astronomical Journal*, 136, 2050 (2008).
8. An, D., Terndrup, D. M., Pinsonneault, M. H., “The Distances to Open Clusters from Main-Sequence Fitting. IV. Galactic Cepheids, the LMC, and the Local Distance Scale,” *Astrophysical Journal*, 671, 1640 (2007).
9. Reed, M. D., Terndrup, D. M., Zhou, A.-Y., Unterborn, C. T., An, D., Eggen, J. R., “Resolving the pulsations of subdwarf B stars: HS 0039+4302, HS 0444+0458 and an examination of the group properties of resolved pulsators,” *Monthly Notices of the Royal Astronomical Society*, 378, 1049 (2007)
10. Reed, M. D., O’Toole, S. J., Terndrup, D. M., Eggen, J. R., Zhou, A.-Y., An, D., Chen, C.-W., Chen, W. P., Lin, H.-C., Akan, C., Cakirli, O., Worters, H., Kilkenny, D., Siwak, M., Zola, S., Kim, S.-L., Gelven, G. A., Harms, S. L., Wolf, G. W., “Follow-up Observations of Pulsating Subdwarf B Stars: Multisite Campaigns on PG 1618+563B and PG 0048+091,” *Astrophysical Journal*, 664, 518 (2007)
11. An, D., Terndrup, D. M., Pinsonneault, M. H., Paulson, D. B., Hanson, R. B., Stauffer, J. R., “The Distances to Open Clusters from Main-Sequence Fitting. III. Improved Accuracy with Empirically Calibrated Isochrones,” *Astrophysical Journal*, 655, 233-260 (2007)
12. Stanek, K. Z., Dai, X., Prieto, J. L., An, D., Garnavich, P. M., Calkins, M. L., Serven, J., Worthey, G., Hao, H., Dobrzycki, A., Howk, C., Matheson, T., “Anomalous Optical Gamma-Ray Burst Afterglows Are Common: Two $z \sim 4$ Bursts, GRB 060206 and GRB 060210,” *Astrophysical Journal Letters*, 654, L21-24 (2007)
13. Zhou, A.-Y., An, D., Eggen, J. R., Reed, M. D., Terndrup, D. M., Harms, S. L., “Discovery of a New Multiperiodic δ Scuti Variable Star,” *Astrophysics and Space Science*, 305, 29-36 (2006)
14. Reed, M. D., Eggen, J. R., Zhou, A.-Y., Terndrup, D. M., Harms, S. L., An, D., Hashier, M. A., “Resolving the pulsations of subdwarf B stars: PG 0154+182, HS 1824+5745 and HS 2151+0857,” *Monthly Notices of the Royal Astronomical Society*, 369, 1529-1536 (2006)

15. Gould, A., Udalski, A., An, D., Bennett, D. P., Zhou, A.-Y., Dong, S., Rattenbury, N. J., Gaudi, B. S., Yock, P. C. M., Bond, I. A., Christie, G. W., Horne, K., Anderson, J., Stanek, K. Z., DePoy, D. L., Han, C., McCormick, J., Park, B.-G., Pogge, R. W., Poindexter, S. D., Soszyński, I., Szymański, M. K., Kubiak, M., Pietrzyński, G., Szewczyk, O., Wyrzykowski, Ł., Ulaczyk, K., Paczyński, B., Bramich, D. M., Snodgrass, C., Steele, I. A., Burgdorf, M. J., Bode, M. F., Botzler, C. S., Mao, S., Swaving, S. C., “Microlens OGLE-2005-BLG-169 Implies That Cool Neptune-like Planets Are Common,” *Astrophysical Journal Letters*, 644, L37-40 (2006)
16. Mirabal, N., Halpern, J. P., An, D., Thorstensen, J. R., Terndrup, D. M., “GRB 060218/SN 2006aj: A Gamma-Ray Burst and Prompt Supernova at $z = 0.0335$,” *Astrophysical Journal Letters*, 643, L99-102 (2006)
17. Zhou, A.-Y., Reed, M. D., Harms, S., Terndrup, D. M., An, D., Zola, S., Gazeas, K. D., Niarchos, P. G., Ogloza, W., Baran, A., Wolf, G. W., “Resolving the pulsations of the subdwarf B star KPD 2109 + 4401,” *Monthly Notices of the Royal Astronomical Society*, 367, 179-185 (2006)
18. Wolf, G. W., Reed, M. D., Zhou, A.-Y., Terndrup, D. M., Harms, S. L., An, D., Chen, C.-W., Lin, H.-C., Zola, S., Baran, A., Ogloza, W., Siwak, M., Gazeas, K. D., Niarchos, P. G., Kilkenny, D., “Follow-Up Observations of Known EC 14026-TYPE Pulsators,” *Baltic Astronomy*, 15, 279-282 (2006)
19. Terndrup, D. M., An, D., Hansen A., Peterson, R. C., Walker, A. R., Sadler, E. M., “Survey for EHB Stars in the Galactic Bulge,” *Astrophysics and Space Science*, 291, 247-252 (2004)

NON-REFEREED ARTICLES / PROCEEDINGS / POSTER PRESENTATIONS (MOST RECENT FIRST):

1. An, D., Ramirez, S. V., Sellgren, K., Arendt, R. G., Boogert, A. C. A., Cotera, A. S., Robitaille, T. P., Schultheis, M., Smith, H. A., Stolovy, S. R., “Discovery of Massive Young Stellar Objects in the Galactic Center with Warm CO₂ Gas Absorption,” American Astronomical Society Meeting Abstracts, 214, #315.06 (2009)
2. An, D., Johnson, J. A., Pinsonneault, M. H., Masseron, T., Delahaye, F., Terndrup, D. M., “Galactic Globular and Open Clusters in the Sloan Digital Sky Survey: Crowded Field Photometry, Cluster Fiducial Sequences, and Theoretical Isochrones in *ugriz*,” American Astronomical Society Meeting Abstracts, 213, #407.13 (2009)
3. An, D., “Empirical Calibration of Isochrones and the Local Distance Scale,” *Bulletin of the American Astronomical Society*, 38, 957 (2007)
4. An, D., Pinsonneault, M. H., Terndrup, D. M., “Distances to the Galactic Cepheids,” Poster presentation in 14th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, Pasadena (2006)
5. Gaudi, B. S., Gould, A., Udalski, A., An, D., Bennett, D., Zhou, A., Dong, S., Rattenbury, N. J., Yock, P. C., Bond, I. A., Christie, G. W., Horne, K., Anderson, J., Stanek, K. Z., MicroFUN Collaboration, OGLE Collaboration, RobotNet Collaboration, “Microlens OGLE-2005-BLG-169 Implies Cool Neptune-Like Planets are Common,” American Astronomical Society Meeting 208, #9.03 (2006)
6. Reed, M. D., Zhou, A.-Y., Harms, S. L., Wolf, G. W., Terndrup, D. M., An, D., Kilkenny, D., Chen, C.-W., Chen, W.-P., Lin, H.-C., Zola, S., Baran, A., Ogloza, W., Siwak, M., Gazeas, K. D., Niarchos, P. G., “Follow-up observations of pulsating subdwarf B stars,” *Memorie della Societa Astronomica Italiana*, 77, 476 (2006)
7. An, D., Terndrup, D. M., Pinsonneault, M. H., “Better distances to open clusters through calibrated isochrones,” *Proceedings of the 13th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun*, held 5-9 July, 2004 in Hamburg, Germany. Edited by F. Favata et al. ESA SP-560, European Space Agency, 395 (2006)

8. Terndrup, D. M., Pinsonneault, M. H., An, D., Marshall, J., Scaife, T., Daane, A., “Anomalous Colors of Spotted Variable Stars in the Alpha Persei Cluster,” American Astronomical Society Meeting 205, #22.05, Bulletin of the American Astronomical Society, 36, 1378 (2004)

CONFERENCE TALKS AND COLLOQUIA (MOST RECENT FIRST):

1. *New Insights into the Milky Way Galaxy*
Department of Astronomy, Kyungpook National University, Dae-gu, Korea, August 5, 2009
2. *New Insights into the Milky Way Galaxy*
Department of Astronomy, Sejong University, Seoul, Korea, August 4, 2009
3. *New Insights into the Milky Way Galaxy*
Korean Astronomy and Space Science Institute, Dae-jun, Korea, August 3, 2009
4. *New Insights into the Milky Way Galaxy*
Department of Astronomy, Seoul National University, Seoul, Korea, July 29, 2009
5. *New Insights into the Milky Way Galaxy*
Department of Astronomy, Yonsei University, Seoul, Korea, July 28, 2009
6. *New Insights into the Milky Way Galaxy*
Department of Astronomy, Chungbuk National University, Cheong-ju, Korea, July 27, 2009
7. *First Spectroscopic Identification of Massive Young Stellar Objects in the Galactic Center*
American Astronomical Society 214th Meeting,
Pasadena, California, June 11, 2009
8. *Improving the Local Distance Scale from Empirically Calibrated Stellar Isochrones*
IGPP Astrophysics & Cosmology Seminar,
Department of Physics and Astronomy, University of California Irvine, February 24, 2009
9. *Massive Young Stellar Objects in the Galactic Center: Spitzer IRS Observations*
Greater IPAC Science Symposium,
IPAC, Caltech, January 22, 2009
10. *SDSS: Crowded Field Photometry, Stellar Isochrones, and Prospects for the Galactic Halo Studies*
American Astronomical Society 213th Meeting,
Long Beach, California, January 6, 2009
11. *Improving the Local Distance Scale from Empirically Calibrated Stellar Isochrones*
IPAC Astronomy Colloquia,
IPAC, Caltech, September 24, 2008
12. *Galactic Globular and Open Clusters in SDSS*
Sloan Digital Sky Survey Collaboration Meeting,
University of Chicago, August 19, 2008
13. *The Empirical Calibration of Isochrones and the Local Distance Scale*
American Astronomical Society 211th Meeting,
Austin, Texas, January 10, 2008
14. *Empirical Isochrone Calibration in ugriz*
Sloan Digital Sky Survey Collaboration Meeting,
Fermi National Accelerator Laboratory, November 3, 2007
15. *Isochrone Calibration in ugriz*
Sloan Digital Sky Survey Collaboration Meeting,
Drexel University, Philadelphia, March 31, 2007

16. *Accurate Distances to Open Clusters using Calibrated Isochrones*
Korean Astronomy and Space Science Institute,
Seoul, Korea, August 16, 2006
17. *Accurate Distances to Open Clusters using Calibrated Isochrones*
Department of Astronomy, Yonsei University,
Seoul, Korea, August 10, 2006