

## Lyman A. Page Jr.

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### Education

Ph.D. Physics, Massachusetts Institute of Technology, 1989  
B.A. Bowdoin College, 1978

### Employment and Research History

Henry DeWolf Smyth Professor of Physics	July 2005 - Present
Professor of Physics	July 1998 - July 2005
Associate Professor of Physics	July 1995 - July 1998
Assistant Professor of Physics	July 1991 - July 1995
Instructor of Physics	July 1990 - July 1991
Princeton University	Princeton, NJ

Page's primary research is on measurements and analysis of the cosmic microwave background (CMB) from ground-based, balloon-borne, and satellite platforms with HEMT amplifiers, SIS mixers, and bolometers. Page has been a PI or CoI on the FIRS, Saskatoon, MSAM, QMAP, TOCO/MAT, and MINT experiments. Page is one of the original co-investigators on the *WMAP* satellite and is the director of the ACT project.

Postdoctoral Research Fellow	October 1989 - July 1990
Graduate Student	September 1983 - September 1989
MIT	Cambridge, MA

Built and flew a four channel balloon-borne bolometric radiometer to measure the anisotropy in the CMB. With the thesis and post-doc data we discovered that interstellar dust does not obey a simple emissivity law at long wavelengths, measured the CMB anisotropy, and confirmed the COBE discovery. We also performed a bolometer-based path-finder measurement of the anisotropy from the South Pole. Thesis advisor: Stephan S. Meyer (now at U. Chicago).

Self employed	February 1980 - September 1983
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Rebuilt a 37' wooden ketch and sailed about the Caribbean and East Coast of the United States. To support myself and my boat, I worked as a painter, carpenter, rigger, and cabinet maker in various ports of call. In the nine months before graduate school, I was based in Boston.

Research Technician	September 1979 - January 1980
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Bartol Research Foundation  
McMurdo Station and South Pole, Antarctica  
Helped operate and maintain a cosmic ray detection station, riometer, and a four inch solar telescope (the first one at the South Pole) in the Antarctic. Spent the 1979 winter at McMurdo Station.

## Mentoring and Advising

Summer Research: Supervised over 80 undergraduates between July 1990 and September 2006.

Graduate students: Ken Ganga (Ph.D., 7/94), Barth Netterfield (Ph.D., 1/95), Amber Miller (Ph.D., 11/00), Huan Tran (Ph.D., 4/02), Mike Nolta (Ph.D., 6/02), Randy Doriese (Ph.D., 8/02), Juan Burwell (MS), Asad Aboobaker (PhD,9/06), Toby Marriage (Ph.D., 11/06), Adam Hincks (current), Eric Switzer (current), Judy Lau (current), Rolando Dunner (with PUC, Chile, current)

Postdoctoral Fellows: Mark Devlin, Hume Feldman, Tom Herbig, Barth Netterfield, Eric Torbet, Angelica de Oliveira Costa, Eddie Guerra, Chris Barnes, Joe Fowler, Michele Limon, Mike Nolta, Joanna Dunkley, Amir Hajian.

## Honors and Awards

Member of the National Academy of Sciences	2006
Fellow of the American Academy of Arts & Sciences	2004
Philips Distinguished Visitor at Haverford College	March 2003
Marc Aaronson Lectureship & Prize	November 2003
Primakoff Lectureship at U. Penn	March 2003
David and Lucile Packard Fellowship	September 1994
Princeton Engineering Council Teaching Award	May 1994 & 1992
Research Corporation Cottrell Scholar	May 1994
National Science Foundation NYI Award	August 1993
NASA Graduate Student Researchers Program Fellowship	1987-1989
Noel C. Little prize in experimental physics	1978

## Service to Community

Member of the AUI Board of Trustees	2005-Present
Member of the JCAP Editorial Board	2006-Present
Reviewer of papers for the Astrophysical Journal	Ongoing
Proposal reviewer for NASA, NSF, NRAO, Research Institute, and PPARC	Ongoing
Advisory board of the Chicago's Kavli Center for Cosmological Physics	2002-2005
Visiting Committee for NASA Goddard Space Flight Center	2004
Member of the NAS Task Force on CMB Physics	2005-2006
External Review Panel for the University of Toronto Dept. of Astronomy	2005
External Advisory Panel for the Harvard Dept. of Physics	2005
Chair of the NASA SEU TWG committee	1997
Organizer for two NAS Frontiers Lecture Series.	

## Publications

1. *Three-Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Beam Profiles, Data Processing, Radiometer Characterization and Systematic Error Limits*, N. Jarosik, C. Barnes, M. R. Greason, R. S. Hill, M. R. Nolta, N. Odegard, J. L. Weiland, R. Bean, C. L. Bennett, O. Dore', M. Halpern, G. Hinshaw, A. Kogut, E. Komatsu, M. Limon, S. S. Meyer, L. Page, D. N. Spergel, G. S. Tucker, E. Wollack, E. L. Wright, astro-ph/0603452, ApJS, Accepted, 2006.
2. *Three-Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Temperature Analysis*, G. Hinshaw, M. R. Nolta, C. L. Bennett, R. Bean, O. Doré, M. R. Greason, M. Halpern, R. S. Hill, N. Jarosik, A. Kogut, E. Komatsu, M. Limon, N. Odegard, S. S. Meyer, L. Page, H. V. Peiris, D. N. Spergel, G. S. Tucker, L. Verde, J. L. Weiland, E. Wollack, E. L. Wright, astro-ph/0603451, ApJS, Accepted, 2006.
3. *Three Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Polarization Analysis*, L. Page, G. Hinshaw, E. Komatsu, M. R. Nolta, D. N. Spergel, C. L. Bennett, C. Barnes, R. Bean, O. Dore', M. Halpern, R. S. Hill, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, N. Odegard, H. V. Peiris, G. S. Tucker, L. Verde, J. L. Weiland, E. Wollack, E. L. Wright, astro-ph/0603450, ApJS, Accepted, 2006.
4. *Wilkinson Microwave Anisotropy Probe (WMAP) Three Year Results: Implications for Cosmology*, D. N. Spergel, R. Bean, O. Doré, M. R. Nolta, C. L. Bennett, G. Hinshaw, N. Jarosik, E. Komatsu, L. Page, H. V. Peiris, L. Verde, C. Barnes, M. Halpern, R. S. Hill, A. Kogut, M. Limon, S. S. Meyer, N. Odegard, G. S. Tucker, J. L. Weiland, E. Wollack, E. L. Wright, astro-ph/0603449, ApJS, Accepted, 2006.
5. *Millimeter-wave antireflection coating for cryogenic silicon lenses*, J. Lau, J. Fowler, T. Marriage, L. Page, J. Leong, E. Wishnow, R. Henry, E. Wollack, M. Halpern, D. Marsden, and G. Marsden, Appl. Opt. 45, 3746-3751, 2006.
6. *Experimental Tests and Modeling of the Optimal Orifice Size for a Closed Cycle 4He Refrigerator*, J. Lau, M. Benna, M. Devlin, S. Dicker, and L. Page, Cryogenics, Volume 46, Issue 11, pg 809, 2006.
7. *How accurately can suborbital experiments measure the CMB?*, A. de Oliveira-Costa, M. Tegmark, M. Devlin, A. Miller, C. B. Netterfield, L. Page, Y. Xu, astro-ph/0406375, Phys. Rev D71, 043004, 2005.
8. *CMB Observations with a Compact Heterogeneous 150 GHz Interferometer in Chile*, J. W. Fowler, W. B. Doriese, T. A. Marriage, H. T. Tran, A. M. Aboobaker, C. Dumont, M. Halpern, Z. D. Kermish, Y.-S. Loh, L. Page, S. T. Staggs, D. H. Wesley) astro-ph/0403137, ApJS, 156:1, 2005.
9. *Results from the First Year of Observations with the Wilkinson Microwave Anisotropy Probe*, L. Page, International Journal of Theoretical Physics, Vol 43:585, Issue 3, 2004.
10. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Dark Energy Induced Correlation with Radio Sources*, M. Nolta, E. L. Wright, L. Page, C. L. Bennett, M. Halpern, G. Hinshaw, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, D. N. Spergel, G. S. Tucker, E. Wollack, ApJ, 608:10, 2004.
11. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Implications for Inflation*, H.V.Peiris, E.Komatsu, L.Verde, D.N.Spergel, C.L.Bennett, M.Halpern, G.Hinshaw, N.Jarosik, A.Kogut, M.Limon, S.Meyer, L.Page, G.S.Tucker, E.Wollack, E.L.Wright, ApJ.S. 148, 215, 2003.
12. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: On-Orbit Radiometer Characterization*, N. Jarosik, C. Barnes, C. L. Bennett, M. Halpern, G. Hinshaw, A. Kogut, M. Limon, S. S. Meyer, L. Page, D. N. Spergel, G. S. Tucker, J. L. Weiland, E. Wollack, E. L. Wright, ApJ.S. 148, 29, 2003.
13. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Tests of Gaussianity*, E. Komatsu, A. Kogut, M. Nolta, C. L. Bennett, M. Halpern, G. Hinshaw, N. Jarosik, M. Limon, S. S. Meyer, L. Page, D. N. Spergel, G. S. Tucker, L. Verde, E. Wollack, E. L. Wright, ApJ.S. 148, 119, 2003.

14. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Preliminary Maps and Basic Results*, C. L. Bennett, M. Halpern, G. Hinshaw, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, L. Page, D. N. Spergel, G. S. Tucker, E. Wollack, E. L. Wright, C. Barnes, M. R. Greason, R. S. Hill, E. Komatsu, M. R. Nolta, N. Odegard, H. V. Peiris, L. Verde, J. L. Weiland, *ApJ.S.* 148, 1, 2003.
15. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Beam Profiles and Window Functions*, L. Page, C. Barnes, G. Hinshaw, D. N. Spergel, J. L. Weiland, E. Wollack, C. L. Bennett, M. Halpern, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, G. S. Tucker, E. L. Wright, *ApJ.S.* 148, 39, 2003.
16. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Determination of Cosmological Parameters*, D. N. Spergel, L. Verde, H. V. Peiris, E. Komatsu, M. R. Nolta, C. L. Bennett, M. Halpern, G. Hinshaw, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, L. Page, G. S. Tucker, J. L. Weiland, E. Wollack, E. L. Wright, *ApJ.S.* 148, 175, 2003,
17. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Data Processing Methods and Systematic Errors Limits*, G. Hinshaw, C. Barnes, C. L. Bennett, M. Greason, M. Halpern, R. S. Hill, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, N. Odegard, D. N. Spergel, G. S. Tucker, J. Weiland, E. Wollack, E. L. Wright, *ApJ.S.* 148, 63, 2003.
18. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Foreground Emission*, C. Bennett, R. S. Hill, G. Hinshaw, M. R. Nolta, N. Odegard, L. Page, D. N. Spergel, J. L. Weiland, E. L. Wright, M. Halpern, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, G. S. Tucker, E. Wollack, *ApJ.S.* 148, 97, 2003.
19. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Galactic Signal Contamination from Sidelobe Pickup*, C. Barnes, R. S. Hill, G. Hinshaw, L. Page, C. L. Bennett, M. Halpern, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, G. S. Tucker, E. Wollack, E. L. Wright, *ApJ.S.* 148, 51, 2003.
20. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Interpretation of the TT and TE Angular Power Spectrum Peaks*, L. Page, M. R. Nolta, C. Barnes, C. L. Bennett, M. Halpern, G. Hinshaw, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, H. V. Peiris, D. N. Spergel, G. S. Tucker, E. Wollack, E. L. Wright, *ApJ.S.* 148, 233, 2003.
21. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Parameter Estimation Methodology*, L. Verde, H. V. Peiris, D. N. Spergel, M. Nolta, C. L. Bennett, M. Halpern, G. Hinshaw, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, G. S. Tucker, E. Wollack, E. L. Wright, *ApJ.S.* 148, 195, 2003.
22. *Wilkinson Microwave Anisotropy Probe (WMAP) First Year Observations: TE Polarization*, A. Kogut, D. N. Spergel, C. Barnes, C. L. Bennett, M. Halpern, G. Hinshaw, N. Jarosik, M. Limon, S. S. Meyer, L. Page, G. Tucker, E. Wollack, E. L. Wright, *ApJ.S.* 148, 161, 2003.
23. *First Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: The Angular Power Spectrum* G. Hinshaw, D. N. Spergel, L. Verde, R. S. Hill, S. S. Meyer, C. Barnes, C. L. Bennett, M. Halpern, N. Jarosik, A. Kogut, E. Komatsu, M. Limon, L. Page, G. S. Tucker, J. Weiland, E. Wollack, E. L. Wright, *ApJ.S.* 148, 155, 2003.
24. *Design, Implementation and Testing of the MAP Radiometers*, N. Jarosik, C. L. Bennett, M. Halpern, G. Hinshaw, A. Kogut, M. Limon, S. S. Meyer, L. Page, M. Pospieszalski, D. N. Spergel, G. S. Tucker, D. T. Wilkinson, E. Wollack, E. L. Wright, Z. Zhang, *ApJ.S.* 145, 413, 2003.
25. *The Optical Design and Characterization of the Microwave Anisotropy Probe*, L. Page C. Jackson, C. Barnes, C. Bennett, M. Halpern, G. Hinshaw, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, D. N. Spergel, G. S. Tucker, D. T. Wilkinson, E. Wollack, E. L. Wright, *ApJ* 585, 566, 2003.
26. *The Microwave Anisotropy Probe (MAP) Mission*, C. L. Bennett, M. Bay, M. Halpern, G. Hinshaw, C. Jackson, N. Jarosik, A. Kogut, M. Limon, S. S. Meyer, L. Page, D. N. Spergel, G. S. Tucker, D. T. Wilkinson, E. Wollack, E. L. Wright, *ApJ* 583, 1, 2003.

27. *The MAT/TOCO Measurement of the Angular Power Spectrum of the Cosmic Microwave Background at 30 and 40 GHz*, M. R. Nolta, M. J. Devlin, W. B. Dorwart, A. D. Miller, L. Page, J. Puchalla, E. Torbet, H. T. Tran, ApJ 598, 97, 2003.
28. *The MAP Satellite Feed Horns*, C. Barnes, M. Limon, L. Page, C. Bennett, S. Bradley, M. Halpern, G. Hinshaw, N. Jarosik, W. Jones, A. Kogut, S. Meyer, O. Motrunich, G. Tucker, D. Wilkinson, and E. Wollack) Ap.J.S. 143, 567, 2002.
29. *The QMAP and MAT/TOCO Experiments for Measuring Anisotropy in the Cosmic Microwave Background*, A. Miller, J. Beach, S. Bradley, R. Caldwell, H. Chapman, M. Devlin, W. Dorwart, T. Herbig, D. Jones, G. Monnelly, C. Netterfield, M. Nolta, L. Page, J. Puchalla, H. Tran, and W. Vinje, Ap.J.S. 140, 115, 2002.
30. *Comparing and combining the Saskatoon, QMAP, and COBE CMB maps*, Y. Xu, M. Tegmark, A. de Oliveira-Costa, M. Devlin, T. Herbig, A. Miller, B. Netterfield and L. Page, PRD 63, 10, 103002, 2001.
31. *Characterizing the Peak in the CMB Angular Power Spectrum*, L. Knox & L. A. Page, PRL 85, 1366-1369, 2000.
32. *Galactic contamination in the QMAP experiment*, de Oliveira-Costa, A. Tegmark, M., Devlin, M. J., Haffner, L. M., Herbig, T., Miller, A., L. Page, Reynolds, R., & Tufte, S. Ap. J. Letters **542**:L5, 2000.
33. *A Measurement of the Angular Power Spectrum of the CMB from  $l=100$  to  $l=400$* , Miller, A. D., Caldwell, R., Devlin, M. D., Dorwart, W. B., Herbig, T., Nolta, M. R., Page, L. A., Puchalla, J. L., Torbet, E., & Tran, H. T., Ap. J. Letters **524**:L1-L4, 1999.
34. *New CMB Power Spectrum Constraints from MSAMI* Wilson, G. W., Knox, L., Dodelson, S., Coble, K., Cheng, E.S., Cottingham, D. A., Fixsen, D. J., Goldin, A. B., Inman, C. A., Kowitt, M. S., Meyer, S.S., Page, L. A., Puchalla, J. L., Ruhl, J. E., & Silverberg, R. F. Ap. J. Submitted 1999. (astro-ph/9902047)
35. *Cosmic Microwave Background Radiation*, Page, L. A. & Wilkinson, D. T., RMP, Centenary **71**:S173, 1999.
36. *A Measurement of the Angular Power Spectrum of the Microwave Background Made from the High Chilean Andes*, Torbet, E., Devlin, M. D., Dorwart, W. B., Herbig, T., Miller, A. D., Nolta, M. R., Page, L. A., Puchalla, J. L., & Tran, H. T., Ap. J. Letters **521**:L79-L82, 1999.
37. *Mapping the Cosmic Microwave Background Anisotropy: Combined Analysis of the QMAP Flights*, de Oliveira-Costa, A., Devlin, M. D., Herbig, T., Miller, A. D., Netterfield, C. B., Page, L. A., & Tegmark, M., Ap. J. Letters **509**:L77-L80, 1998.
38. *Mapping the Cosmic Microwave Background Anisotropy: The Second Flight of the QMAP Experiment*, Herbig, T., Devlin, M. D., de Oliveira-Costa, A., Miller, A. D., Page, L. A., & Tegmark, M., Ap. J. Letters **509**:L73-L76, 1998.
39. *Mapping the Cosmic Microwave Background Anisotropy: The First Flight of the QMAP Experiment*, Devlin, M. D., de Oliveira-Costa, A., Herbig, T., Miller, A. D., Netterfield, C. B., Page, L. A., & Tegmark, M., Ap. J. Letters **509**:L69-L72, 1998.
40. *Galactic Emission at 19 GHz*, de Oliveira-Costa, A., Tegmark, M., Page, L. A., & Boughn, S., Ap. J. Letters **509**:L9-L12, 1998.
41. *A Millimeter/Submillimeter Search for the Sunyaev-Zel'dovich Effect in the Coma Cluster*, Silverberg, R. F., Cheng, E. S., Cottingham, D. A., Fixsen, D. J., Inman, C. A., Kowitt, M. S., Meyer, S. S., Page, L. A., Puchalla, J. L., & Rephaeli, J. L., Ap. J. **485**:22, 1997.
42. *Galactic Microwave Emission at Degree Angular Scales*, de Oliveira-Costa, A., Devlin, M., Netterfield, C. B., Page, L. A., Tegmark, M., & Wollack, E. J., Ap. J. Lett, **482**:L17, 1997.
43. *A Detection of Bright Features in the Microwave Background*, Kowitt, M. S., Cheng, E. S., Cottingham, D. A., Fixsen, D. J., Inman, C. A., Meyer, S. S., Page, L. A., Puchalla, J. L., Ruhl, J.E., & Silverberg, R. F. Ap. J. **482**:L7, 1997.

44. *A CMBR Measurement Reproduced: A Statistical Comparison of MSAM1-94 to MSAM1-92*, Inman, C. A., Cheng, E. S., Cottingham, D. A., Fixsen, D. J., Kowitt, M. S., Meyer, S. S., Page, L. A., Puchalla, J. L., Ruhl, J. E., & Silverberg, R. F., *Ap. J.* **478**:L1-L4, 1997.
45. *An Instrument for Investigation of the Cosmic Microwave Background Radiation at Intermediate Angular Scales*, Wollack, E. J., Devlin, M. D., Jarosik, N. C., Netterfield, C. B., Page, L. A., & Wilkinson, D. T., *Ap. J.*, **476**:440, 1997.
46. *A High-Resolution Map of the Cosmic Microwave Background Around the North Celestial Pole*, Tegmark, M., de Oliveira-Costa, A., Devlin, M., Netterfield, C. B., Page, L. A., & Wollack, E. J., *Ap. J. Lett.*, **474**:L77, 1997.
47. *A Measurement of the Angular Power Spectrum of the Anisotropy in the Cosmic Microwave Background*, Netterfield, C. B., Devlin, M. D., Jarosik, N. C., Page, L. A., & Wollack, E. J. *Ap. J.*, **474**:47, 1997.
48. *A High Capacity 0.23 K  $^3\text{He}$  Refrigerator for Balloon-Borne Payloads*, Cheng, E. C., Meyer, S. S., & Page, L. A., *RSI*, **67**:11, 1996.
49. *A Balloon-Borne Millimeter-Wave Telescope for Cosmic Microwave Background Anisotropy Measurements*, Fixsen, D. J., Cheng, E. S., Cottingham, D. A., Folz, W. C., Inman, C. A., Kowitt, M. S., Meyer, S. S., Page, L. A., Puchalla, J. L., Ruhl, J. E., & Silverberg, R. F., *Ap. J.*, **470**:63, 1996.
50. *MSAM1-94: Repeated Measurement of Medium-Scale Anisotropy in the Cosmic Microwave Background Radiation*, Cheng, E. S., Cottingham, D. A., Fixsen, D. J., Inman, C. A., Kowitt, M. S., Meyer, S. S., Page, L. A., Puchalla, J. L., Ruhl, J.R. & Silverberg, R. F., *Ap. J. Lett.*, **456**:L71, 1996.
51. *The MSAM/TopHat Program of Anisotropy Measurements*, Kowitt, M. S., Cheng, E. S., Cottingham, D. A., Farooqui, K., Fixsen, D. J., Ganga, K., Inman, C. A., Meyer, S. S., Page, L. A., Piccirillo, L., Puchalla, J. L., Ruhl, J., Schaefer, R. K., Silverberg, R. F., Timbie, P. T., Wilson, G., & Zhou, J. W., *Astro. Lett. & Comm.* **32**:273, 1995.
52. *The Anisotropy in the Cosmic Microwave Background at Degree Angular Scales*, Netterfield, C. B., Jarosik, N. C., Page, L. A., David Wilkinson, & Wollack, E. J., *Ap. J. Lett.*, **444**:L69, 1995.
53. *The Far Infrared Survey: Cross-Correlation Function With The First-Year DMR Maps and Auto-Correlation Function*, Page, L. A., Cheng, E. S., Ganga, K. A., & Meyer S. S., *Astro. Lett. & Comm.*, **32**:217, 1995.
54. *A Degree Scale Measurement of the Anisotropy in the Cosmic Microwave Background Radiation*, Wollack, E. J., Jarosik, N. C., Netterfield C. B., Page, L. A., & David Wilkinson, *Astro. Lett. & Comm.*, **32**:239, 1995.
55. *The Amplitude and Spectral Index of the Large Angular Scale Anisotropy in the Cosmic Microwave Background Radiation*, Ganga, K. A., Page, L. A., Cheng, E. S., & Meyer S. S., *Ap. J. Lett.*, **432**:L15, 1994.
56. *A Measurement of the Medium Scale Anisotropy in the Cosmic Microwave Background Radiation*, Cheng, E. S., Cottingham, D. A., Fixsen, D. J., Inman, C. A., Kowitt, M. S., Meyer, S. S., Page, L. A., Puchalla, J. L., & Silverberg, R. F. *Ap. J. Lett.*, **422**:L37, 1994.
57. *A Millimeter/Submillimeter Wavelength Filter System*, Page, L. A., Cheng, E. S., Golubovic, B., Gundersen, J., & Meyer, S. S., *Applied Optics*, **33**:1, 11, 1994.
58. *A Measurement of the Anisotropy in the Cosmic Microwave Background Radiation at Degree Angular Scales*, Wollack, E. J., Jarosik, N. C., Netterfield C. B., Page, L. A., & David Wilkinson, *Ap. J. Lett.*, **419**:L49, 1993.
59. *Cross-Correlation Between the 170 GHz Survey Map and the COBE Differential Microwave Radiometer First-Year Maps*, Ganga, K. A., Cheng, E. S., Meyer S. S., & Page, L. A., *Ap. J. Lett.*, **410**:L57, 1993.
60. *Resonant Cryogenic Chopper*, Page, L. A., Cheng, E. S., & Meyer S. S., *Applied Optics*, **31**:1, 1992.

61. *A Measurement of the Large-Scale Cosmic Microwave Background Anisotropy at 1.8 Millimeter Wavelength*, Meyer, S.S., Cheng, E.S., & Page, L.A., *Ap. J. Lett.*, **371**:L7-L9, 1991.
62. *A Large-Scale Cosmic Microwave Background Anisotropy Measurement at Millimeter and Submillimeter Wavelengths*, Page, L.A., Cheng, E.S., & Meyer, S.S., *Ap. J. Lett.*, **355**:L1-L4, 1990.

### Non-refereed Publications

1. *Task Force on Cosmic Microwave Background Research*, This report was sponsored by the AAAC and HEPAP committees and advises the NSF, NASA, and DOE on planning and funding CMB research. Authors: James Bock, Sarah Church, Mark Devlin, Gary Hinshaw, Andrew Lange, Adrian Lee, L. Page, Bruce Partridge, John Ruhl, Max Tegmark, Peter Timbie, Rainer Weiss (chair), Bruce Winstein, and Matias Zaldarriaga) Available from the NSF through <http://www.nsf.gov/mps/ast/tfcr.jsp>. September, 2005.
2. *Maps of the Cosmos*, L. Page, Proceedings of the 216th symposium of the International Astronomical Union held during the IAU General Assembly XXV, Sydney, Australia, 14-17 July 2003. ed by M. Colless, L. Stavelly-Smith, and R.A. Stathakis. Astronomical Society of the Pacific (ASP), 2005.
3. *The MAP Satellite Mission to Map the CMB Anisotrop*, L. Page, Proceedings of IAU Symposium No. 201, Manchester, United Kingdom, 7-11 August 2000. Edited by A. Lasenby and A. Wilkinson. San Francisco, CA: Astronomical Society of the Pacific (ASP), (astro-ph/0012214), 2005.
4. *The Wilkinson Microwave Anisotropy Probe*, L. Page, Carnegie Observatories Astrophysics Series, Vol 2: Measuring and Modeling the Universe, ed. by W. L. Freedman. Cambridge University Press, 2004.
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