

## BRUCE W. LITES

### Professional Preparation

|                                       |              |             |
|---------------------------------------|--------------|-------------|
| University of Colorado, Boulder       | Astrophysics | Ph.D., 1972 |
| University of Colorado, Boulder       | Physics      | M.S. 1969   |
| University of New Mexico, Albuquerque | Physics      | B.S. 1967   |

Thesis: *Observation and analysis of the solar neutral iron spectrum.*

*Ph. D Advisor:* Grant Athay  
*Post Doctoral Advisor:* Edith Mueller

### Appointments

|                                   |   |              |
|-----------------------------------|---|--------------|
| Senior Scientist Emeritus         | NCAR/High Altitude Observatory  | 2013–Present |
| Senior Scientist                  | NCAR/High Altitude Observatory  | 1989–2012    |
| Scientist III                     | NCAR/High Altitude Observatory  | 1984–1989    |
| Associate Astronomer              | National Solar Observatory  | 1980–1984    |
| Visiting Scientist                | NCAR/High Altitude Observatory  | 1980         |
| Special Project Scientist         | NCAR/High Altitude Observatory  | 1979–1980    |
| Research Associate                | University of Colorado<br>Laboratory for Atmospheric<br>and Space Physics | 1974–1979    |
| Post-Doctoral<br>Maitre-Assistant | Observatoire de Genève<br>University of Genève (Switzerland)              | 1972–1974    |

### Selected Professional Service

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|-----------|---|
| 2015      | Delivery of a series of six lectures “Solar Polarization Measurements: Instruments and Techniques” at the 3 <sup>rd</sup> SOLARNET School in Granada, Spain, May 2015 |
| 2013–2014 | Principal organizer of IAU Symposium 305 “Polarimetry: From the Sun to Stars and Stellar Environments”, Costa Rica, December 2014                                     |
| 2013      | Visiting Professor, National Astronomical Observatory of Japan, Tokyo, Japan, September – November 2013   |

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| 2009–Present | Co–Investigator on the Interface Region Imaging Spectrograph (NASA SMEX mission)                         |
| 2008–2009    | Principal Organizer and Proceedings Editor, Second <i>Hinode</i> Science Meeting                         |
| 2005–2012    | Scientific Advisory Committee, Kiepenheuer-Institut für Sonnenphysik, Freiburg, Germany                  |
| 2004–2005    | Co-organizer, Solar Polarization Workshop 4  |
| 2003         | Chair, THEMIS Visiting Committee   |
| 2002–Present | Associate Investigator, Helioseismic and Magnetic Imager instrument on NASA's Solar Dynamics Observatory |
| 2001–2007    | Principal Investigator, NASA, US Contribution to <i>Sunrise</i> Antarctic Balloon investigation          |
| 2001–2005    | Member, Advanced Technology Solar Telescope Science Working Group  |
| 1999–Present | Deputy PI, <i>Solar-B</i> Optical Telescope Focal Plane Package  |
| 1996–1997    | Co-Organizer, Solar Magnetism Initiative Workshops   |
| 1994–1997    | Member, NASA Science Working Group NASA <i>Solar-B</i> mission   |
| 1993–1996    | Member, National Solar Observatory User's Committee  |
| 1991         | Vice President, LEST Foundation  |
| 1990–1992    | Section Head, HAO Solar Interior and Lower Atmosphere  |
| 1989–1990    | Member, Solar Panel, Optical and Infrared Panel, National Academy of Sciences, A&A Survey Committee      |
| 1988–1992    | Member, Science Working Group, NASA Orbiting Solar Laboratory  |
| 1988         | Member, U.S. Scientific and Technical Working Group for LEST   |
| 1984         | Organizer, National Solar Observatory conference Chromospheric Diagnostics and Modeling                  |
| 1976–1979    | Co-Investigator, University of Colorado experiment on Orbiting Solar Observatory ( <i>OSO-8</i> )        |

## **Recent Awards**

- 2013                      Recipient, NCAR Outstanding Publication Award
- 2010                      Recipient, UCAR Distinguished Achievement Award

## PUBLICATIONS

### Refereed

1. T. Shimizu, B. W. Lites, and Y. Bamba, 2014: "High-Speed Photospheric Material Flow Observed at the Polarity Inversion Line of a  $\delta$ -Type Sunspot Producing an X5.4 Flare on 2012 March 7", *PASJ*, **66 (SP1)**, S14.
2. B. W. Lites, R. Centeno, and S. W. McIntosh, 2014: "The Solar Cycle Dependence of the Weak Internetwork Flux", *PASJ*, **66 (SP1)**, S4.
3. J. M. Borrero, B. W. Lites, A. Lagg, R. Rezaei, and M. Rempel, 2014: "Comparison of Inversion Codes for Polarized Line Formation in MHD Simulations. I. Milne-Eddington Codes", *A&A*, **572**, 54-66.
4. M. Kubo, B. C. Low, and B. W. Lites, 2014: "Unresolved Mixed Polarity Magnetic Fields at Flux Cancellation Site in Solar Photosphere at 0.3" Spatial Resolution", *ApJ Letters*, **793**, L9-L13.
5. B. De Pontieu, A. M. Title, J. R. Lemen, G. D. Kushner, D. J. Akin, B. Alard, T. Berger, P. Boerner, M. Cheung, C. Chou, J. F. Drake, D. W. Duncan, S. Freeland, G. F. Heyman, C. Hoffman, N. E. Hurlburt, R. W. Lindgren, D. Mathur, R. Rehse, D. Slabolish, R. Seguin, C. J. Schrijver, T. D. Tarbell, J.-P. Wülser, C. J. Wolfson, C. Yanari, J. Mudge, N. Nguyen-Phuc, R. Timmons, R. van Bezooijen, I. Weingrod, R. Brookner, G. Butcher, B. Dougherty, J. Eder, V. Knagenhjelm, S. Larsen, D. Mansir, L. Phan, P. Boyle, P. N. Cheimets, E. E. DeLuca, L. Golub, R. Gates, E. Hertz, S. McKillop, S. Park, T. Perry, W. A. Podgorski, K. Reeves, S. Saar, P. Testa, H. Tian, M. Weber, C. Dunn, S. Eccles, S. A. Jaeggli, C. C. Kankelborg, K. Mashburn, N. Pust, L. Springer, R. Carvalho, L. Kleint, J. Marmie, E. Mazmanian, T. M. D. Pereira, S. Sawyer, J. Strong, S. P. Worden, M. Carlsson, V. H. Hansteen, J. Leenaarts, M. Weismann, J. Aloise, K. C. Chu, R. I. Bush, P. H. Scherrer, P. Brekke, J. Martinez-Sykora, B. W. Lites, S. W. McIntosh, H. Uitenbroek, T. J. Okamoto, M. A. Gummin, G. Auken, P. Jerram, P. Pool, and N. Waltham, 2014: "The Interface Region Imaging Spectrograph (IRIS)", *Solar Physics*, **289**, 2733-2779.
6. R. Casini, A. Asensio Ramos, B. W. Lites, and A. López Ariste, 2013: "Improved Search of Principal Component Analysis Databases for Spectro-polarimetric Inversion", *ApJ*, **773**, 180.
7. B. W. Lites and K. Ichimoto, 2013: "The SP\_PREP Data Preparation Package for the Hinode Spectro-Polarimeter", *Solar Physics*, 2013, **283**, 601-629.
8. B. W. Lites, D. L. Akin, G. Card, T. Cruz, D. W. Duncan, C. G. Edwards, D. F. Elmore, C. Hoffmann, Y. Katsukawa, N. Katz, M. Kubo, K. Ichimoto, T. Shimizu, R. A. Shine, K. V. Strander, A. Suematsu, T. D. Tarbell, A. M. Title, and S. Tsuneta, 2013: "The Hinode Spectro-Polarimeter", *Solar Physics*, **283**, 579-599.

9. B. W. Lites, 2011: Hinode Observations Suggesting the Presence of a Local Small-Scale Turbulent Dynamo, *ApJ*, **737**, 52-60.
10. Kubo, M., Ichimoto, K., Lites, B. W., and Shine, R. A., 2011: Temporal Relation Between the Disappearance of Penumbral Fine-scale Structure and Evershed Flow", *ApJ*, **731**, 84-.
11. Barthol, P., Gandorfer, A., Solanki, S. K., Schüssler, M., Chares, B., Curdt, W., Deutsch, W., Feller, A., Germerott, D., Grauf, B., Heerlein, K., Hirzberger, J., Kolleck, M., Meller, R., Müller, R., Riethmüller, T. L., Tomasch, G., Knölker, M., Lites, B.W., Card, G., Elmore, D., Fox, J., Lecinski, A., Nelson, P., Summers, R., Watt, A., Martínez Pillet, V., Bonet, J. A., Schmidt, W., Berkefeld, T., Title, A.M., Domingo, V., Gasent Blesa, J. L., Del Toro Iniesta, J. C., López Jiménez, A., Álvarez-Herrero, A., Sabau-Graziati, L., Widani, C., Haberler, P., Härtel, K., Kampf, D., Levin, T., Pérez Grande, I., Sanz-Andrés, and A., Schmidt, E., "The Sunrise Mission", *Solar Physics*, **268**, 1-34.
12. Lites, B. W., Kubo, M., Berger, T., Frank, Z., Shine, R., Tarbell, T., Title, A., Okamoto, T. J., and Otsuji, K., 2010: Emergence of Helical Flux and the Formation of an Active Region Filament Channel. *ApJ*, **718**, 474-487.
13. Berger, T. E., Slater, G., Hurlburt, N., Shine, R., Tarbell, T., Title, A., Lites, B. W., Okamoto, T. J., Ichimoto, K., Katsukawa, Y., Magara, T., Suematsu, Y., and Shimizu, T., 2010: Quiescent Prominence Dynamics Observed with the Hinode Solar Optical Telescope. I. Turbulent Upflow Plumes. *ApJ*, **716**, 1288-1307.
14. Snik, F., de Wijn, A. G., Ichimoto, K., Fischer, C. E., Keller, C. U., and Lites, B. W., 2010, Observations of solar scattering polarization at high spatial resolution. *A&A*, 519, A18-+.
15. Lites, B. W., Casini, R., Manso Sainz, R., Jurcak, J., Ichimoto, K., Ishikawa, R., Okamoto, T. J., Tsuneta, S., and Bellot Rubio, L., 2010: Scattering Polarization in the Fe I 630 nm Emission Lines at the Extreme Limb of the Sun. *ApJ*, **713**, 450-457.
16. Kubo, M., Low, B. C., and Lites, B. W., 2010: Granular-scale Magnetic Flux Cancellations in the Photosphere. *ApJ*, **712**, 1321-1330.
17. Lites, B. W., 2009: The Topology and Behavior of Magnetic Fields Emerging at the Solar Photosphere}. *Space Sci. Reviews*, **144**, 197-212.
18. Su, Y., van Ballegooijen, A., Lites, B. W., Deluca, E. E., Golub, L., Grigis, P. C., Huang, G., and Ji, H., 2009: Observations and Nonlinear Force-Free Field Modeling of Active Region 10953. *ApJ*, **691**, 105-114
19. Fischer, C.E., A.G. de Wijn, R. Centeno, B.W. Lites and C.U. Keller, 2009: Statistics of convective collapse events in the photosphere and chromosphere observed with the Hinode SOT. *A&A*, **504**, 583-588.
20. Okamoto, T. J., S. Tsuneta, B. W. Lites, M. Kubo, T. Yokoyama, T. E. Berger, K. Ichimoto, Y. Katsukawa, S. Nagata, K. Shibata, T. Shimizu, R. A. Shine, Y. Suematsu, T. D. Tarbell, and A. M. Title, 2009: Prominence Formation Associated with an Emerging Helical Flux Rope. *ApJ*, **697**, 913-922.

21. Shimizu, T., Y. Katsukawa, M. Kubo, B. W. Lites, K. Ichimoto, Y. Suematsu, S. Tsuneta, S. Nagata, R. A. Shine, and T. D. Tarbell, 2009: Hinode Observation of the Magnetic Fields in a Sunspot Light Bridge Accompanied by Long-Lasting Chromospheric Plasma Ejections. *ApJ*, **696**, L66–L69.
22. De Rosa, M.L., C.J. Schrijver, G. Barnes, K.D. Leka, B.W. Lites, M.J. Aschwanden, T. Amari, A. Canou, J.M. McTiernan, S. Regnier, J.K. Thalmann, G. Valori, M.S. Wheatland, T. Wiegmann, M.C.M. Cheung, P.A. Conlon, M. Fuhrmann, B. Inhester and T. Tadesse, 2009: Critical Assessment of Nonlinear Force-Free Field Modeling of the Solar Corona for Active Region 10953. *ApJ*, **696**, 1780–1791.
23. Socas-Navarro, H., S. W. McIntosh, R. Centeno, A. G. de Wijn, and B. W. Lites, 2009: Direct Imaging of Fine Structure in the Chromosphere of a Sunspot Umbra. *ApJ*, **696**, 1683–1688.
24. Su, Y., A. van Ballegooijen, B.W. Lites, E.E. Deluca, L. Golub, P.C. Grigis, G. Huang and H. Ji, 2009: Observations and Nonlinear Force-Free Field Modeling of Active Region 10953. *ApJ*, **691**, 105–114.
25. Tsuneta, S., K. Ichimoto, Y. Katsukawa, B. W. Lites, K. Matsuzaki, S. Nagata, D. Orozco Su´arez, T. Shimizu, M. Shimojo, R. A. Shine, Y. Suematsu, T. K. Suzuki, T. D. Tarbell, and A. M. Title, 2008: The Magnetic Landscape of the Sun’s Polar Region. *ApJ*, **688**, 1374–1381.
26. Kubo, M., B. W. Lites, T. Shimizu, and K. Ichimoto, 2008: Magnetic Flux Loss and Flux Transport in a Decaying Active Region. *ApJ*, **686**, 1447–1453.
27. De Wijn, A.G., B.W. Lites, T.E. Berger, Z.A. Frank, T.D. Tarbell and R. Ishikawa, 2008: Hinode Observations of Magnetic Elements in Internetwork Areas. *ApJ*, **684**, 1469–1476.
28. Kubo, M., B. W. Lites, K. Ichimoto, T. Shimizu, Y. Suematsu, Y. Katsukawa, T. D. Tarbell, R. A. Shine, A. M. Title, S. Nagata, and S. Tsuneta, 2008: Disintegration of Magnetic Flux in Decaying Sunspots as Observed with the Hinode SOT. *ApJ*, **681**, 1677–1687.
29. Ichimoto, K., B. Lites, D. Elmore, Y. Suematsu, S. Tsuneta, Y. Katsukawa, T. Shimizu, R. Shine, T. Tarbell, A. Title, J. Kiyohara, K. Shinoda, G. Card, A. Lecinski, Strender, K., M. Nakagiri, M. Miyashita, M. Noguchi, C. Hoffmann, and T. Cruz, 2008: Polarization Calibration of the Solar Optical Telescope onboard Hinode. *Sol. Phys.*, **249**, 233–261.
30. Tsuneta, S., K. Ichimoto, Y. Katsukawa, S. Nagata, M. Otsubo, T. Shimizu, Y. Suematsu, M. Nakagiri, M. Noguchi, T. Tarbell, A. Title, R. Shine, W. Rosenberg, C. Hoffmann, B. Jurcevich, G. Kushner, M. Levay, B. Lites, D. Elmore, T. Matsushita, N. Kawaguchi, H. Saito, I. Mikami, L. D. Hill, and J. K. Owens, 2008: The Solar Optical Telescope for the Hinode Mission: An Overview. *Sol. Phys.*, **249**, 167–196.
31. Matsumoto, T., R. Kitai, K. Shibata, S. Nagata, K. Otsuji, T. Nakamura, H. Watanabe, S. Tsuneta, Y. Suematsu, K. Ichimoto, T. Shimizu, Y. Katsukawa, T. D. Tarbell, B. W. Lites, R. A. Shine, and A. M. Title, 2008: Cooperative Observation of Ellerman Bombs between the

- Solar Optical Telescope aboard Hinode and Hida/Domeless Solar Telescope. *PASJ*, **60**, 577–584.
32. Shimizu, T., B. W. Lites, Y. Katsukawa, K. Ichimoto, Y. Suematsu, S. Tsuneta, S. Nagata, M. Kubo, R. A. Shine, and T. D. Tarbell, 2008: Frequent Occurrence of High-Speed Local Mass Downflows on the Solar Surface. *ApJ*, **680**, 1467–1476.
  33. Nagata, S., S. Tsuneta, Y. Suematsu, K. Ichimoto, Y. Katsukawa, T. Shimizu, T. Yokoyama, T. D. Tarbell, B. W. Lites, R. A. Shine, T. E. Berger, A. M. Title, L. R. Bellot Rubio, and D. Orozco Suárez, 2008: Formation of Solar Magnetic Flux Tubes with Kilogauss Field Strength Induced by Convective Instability. *ApJ*, **677**, L145–L147.
  34. Borrero, J. M., B. W. Lites, and S. K. Solanki, 2008: Evidence of magnetic field wrapping around penumbral filaments. *A&A*, **481**, L13–L16.
  35. Ishikawa, R., S. Tsuneta, K. Ichimoto, H. Isobe, Y. Katsukawa, B. W. Lites, S. Nagata, T. Shimizu, R. A. Shine, Y. Suematsu, T. D. Tarbell, and A. M. Title, 2008: Transient horizontal magnetic fields in solar plage regions. *A&A*, **481**, L25–L28.
  36. Ichimoto, K., S. Tsuneta, Y. Suematsu, Y. Katsukawa, T. Shimizu, B. W. Lites, M. Kubo, T. D. Tarbell, R. A. Shine, A. M. Title, and S. Nagata, 2008: Net circular polarization of sunspots in high spatial resolution. *A&A*, **481**, L9–L12.
  37. Berger, T. E., R. A. Shine, G. L. Slater, T. D. Tarbell, A. M. Title, T. J. Okamoto, K. Ichimoto, Y. Katsukawa, Y. Suematsu, S. Tsuneta, B. W. Lites, and T. Shimizu, Hinode SOT Observations of Solar Quiescent Prominence Dynamics. *ApJ*, **676**, L89–L92, Mar. 2008.
  38. Schrijver, C. J., M. L. DeRosa, T. Metcalf, G. Barnes, B. Lites, T. Tarbell, J. McTiernan, G. Valori, T. Wiegmann, M. S. Wheatland, T. Amari, G. Aulanier, P. Demoulin, M. Fuhrmann, K. Kusano, S. Regnier, and J. K. Thalmann, 2008: Non-linear force-free field modeling of a solar active region around the time of a major flare and coronal mass ejection. *ApJ*, **675**, 1637–1644.
  39. Okamoto, T. J., S. Tsuneta, B. W. Lites, M. Kubo, T. Yokoyama, T. E. Berger, K. Ichimoto, Y. Katsukawa, S. Nagata, K. Shibata, T. Shimizu, R. A. Shine, Y. Suematsu, T. D. Tarbell, and A. M. Title, Emergence of a Helical Flux Rope under an Active Region Prominence. *ApJ*, **673**, L215–L218, Feb. 2008.
  40. Lites, B. W., M. Kubo, H. Socas-Navarro, T. Berger, Z. Frank, R. Shine, T. Tarbell, A. Title, K. Ichimoto, Y. Katsukawa, S. Tsuneta, Y. Suematsu, T. Shimizu, and S. Nagata, 2008: The Horizontal Magnetic Flux of the Quiet-Sun Internetwork as Observed with the Hinode Spectro-Polarimeter. *ApJ*, **672**, 1237–1253.
  41. Ichimoto, K., Y. Suematsu, S. Tsuneta, Y. Katsukawa, T. Shimizu, R. A. Shine, T. D. Tarbell, A. M. Title, B. W. Lites, M. Kubo, and S. Nagata, 2007: Twisting Motions of Sunspot Penumbral Filaments. *Science*, **318**, 1597–1599.
  42. Katsukawa, Y., T. E. Berger, K. Ichimoto, B. W. Lites, S. Nagata, T. Shimizu, R. A. Shine, Y. Suematsu, T. D. Tarbell, A. M. Title, and S. Tsuneta, 2007: Small-Scale Jetlike Features

in Penumbra Chromospheres. *Science*, **318**, 1594–1597.

43. Shibata, K., T. Nakamura, T. Matsumoto, K. Otsuji, T. J. Okamoto, N. Nishizuka, T. Kawate, H. Watanabe, S. Nagata, S. UeNo, R. Kitai, S. Nozawa, S. Tsuneta, Y. Suematsu, K. Ichimoto, T. Shimizu, Y. Katsukawa, T. D. Tarbell, T. E. Berger, B. W. Lites, R. A. Shine, and A. M. Title, 2007: Chromospheric Anemone Jets as Evidence of Ubiquitous Reconnection. *Science*, **318**, 1591–1594.
44. Okamoto, T. J., S. Tsuneta, T. E. Berger, K. Ichimoto, Y. Katsukawa, B. W. Lites, S. Nagata, K. Shibata, T. Shimizu, R. A. Shine, Y. Suematsu, T. D. Tarbell, and A. M. Title, 2007: Coronal Transverse Magnetohydrodynamic Waves in a Solar Prominence. *Science*, **318**, 1577–1580.
45. Rezaei, R., O. Steiner, S. Wedemeyer-Böhmer, R. Schlichenmaier, W. Schmidt, and B. W. Lites, 2007: Hinode observations reveal boundary layers of magnetic elements in the solar photosphere. *A&A*, **476**, L33–L36.
46. Orozco Suárez, D., L. R. Bellot Rubio, J. C. Del Toro Iniesta, S. Tsuneta, B. Lites, K. Ichimoto, Y. Katsukawa, S. Nagata, T. Shimizu, R. A. Shine, Y. Suematsu, T. D. Tarbell, and A. M. Title, 2007: Strategy for the Inversion of Hinode Spectropolarimetric Measurements in the Quiet Sun. *PASJ*, **59**, S837–S844.
47. Isobe, H., M. Kubo, T. Minoshima, K. Ichimoto, Y. Katsukawa, T. D. Tarbell, S. Tsuneta, T. E. Berger, B. Lites, S. Nagata, T. Shimizu, R. A. Shine, Y. Suematsu, and A. M. Title, 2007: Flare Ribbons Observed with G-band and FeI 6302Å, Filters of the Solar Optical Telescope on Board Hinode. *PASJ*, **59**, S807–S813.
48. Kubo, M., T. Yokoyama, Y. Katsukawa, B. Lites, S. Tsuneta, Y. Suematsu, K. Ichimoto, T. Shimizu, S. Nagata, T. D. Tarbell, R. A. Shine, A. M. Title, and D. Elmore, 2007: Hinode Observations of a Vector Magnetic Field Change Associated with a Flare on 2006 December 13. *PASJ*, **59**, S779–S784.
49. Otsuji, K., K. Shibata, R. Kitai, S. Ueno, S. Nagata, T. Matsumoto, T. Nakamura, H. Watanabe, S. Tsuneta, Y. Suematsu, K. Ichimoto, T. Shimizu, Y. Katsukawa, T. D. Tarbell, B. Lites, R. A. Shine, and A. M. Title, 2007: Small-Scale Magnetic-Flux Emergence Observed with Hinode Solar Optical Telescope. *PASJ*, **59**, S649–S654.
50. Li, H., T. Sakurai, K. Ichimoto, Y. Suematsu, S. Tsuneta, Y. Katsukawa, T. Shimizu, R. A. Shine, T. D. Tarbell, A. M. Title, B. Lites, M. Kubo, S. Nagata, J. Kotoku, K. Shibasaki, S. H. Saar, and M. Bobra, 2007: Response of the Solar Atmosphere to Magnetic Flux Emergence from Hinode Observations. *PASJ*, **59**, S643–S648.
51. Sekii, T., A. G. Kosovichev, J. Zhao, S. Tsuneta, H. Shibahashi, T. E. Berger, K. Ichimoto, Y. Katsukawa, B. Lites, S. Nagata, T. Shimizu, R. A. Shine, Y. Suematsu, T. D. Tarbell, and A. M. Title, 2007: Initial Helioseismic Observations by Hinode/SOT. *PASJ*, **59**, S637–S641.
52. Nagashima, K., T. Sekii, A. G. Kosovichev, H. Shibahashi, S. Tsuneta, K. Ichimoto, Y. Katsukawa, B. Lites, S. Nagata, T. Shimizu, R. A. Shine, Y. Suematsu, T. D. Tarbell, and A.



- M. Title, 2007: Observations of Sunspot Oscillations in G Band and CaII H Line with Solar Optical Telescope on Hinode. *PASJ*, **59**, S631–S636.
53. Moon, Y. J., Y.H. Kim, Y.D. Park, K. Ichimoto, T. Sakurai, J. Chae, K. S. Cho, S. Bong, Y. Suematsu, S. Tsuneta, Y. Katsukawa, M. Shimojo, T. Shimizu, R. A. Shine, T. D. Tarbell, A. M. Title, B. Lites, M. Kubo, S. Nagata, and T. Yokoyama, 2007: Hinode SP Vector Magnetogram of AR10930 and Its Cross-Comparison with MDI. *PASJ*, **59**, S625–S612.
54. Chae, J., Y.J. Moon, Y.D. Park, K. Ichimoto, T. Sakurai, Y. Suematsu, S. Tsuneta, Y. Katsukawa, T. Shimizu, R. A. Shine, T. D. Tarbell, A. M. Title, B. Lites, M. Kubo, S. Nagata, and T. Yokoyama, 2007: Initial Results on Line-of-Sight Field Calibrations of SP/NFI Data Taken by SOT/Hinode. *PASJ*, **59**, S619–S624.
55. Morinaga, S., S. Nagata, K. Ichimoto, Y. Suematsu, S. Tsuneta, Y. Katsukawa, T. Shimizu, R. A. Shine, T. D. Tarbell, A. M. Title, B. Lites, M. Kubo, and T. Sakurai, 2007: Center-to-Limb Variation of Stokes V Asymmetries in Solar Pores Observed with the Hinode Spectro-Polarimeter. *PASJ*, **59**, S613–S617.
56. Kubo, M., K. Ichimoto, T. Shimizu, S. Tsuneta, Y. Suematsu, Y. Katsukawa, S. Nagata, T. D. Tarbell, R. A. Shine, A. M. Title, Z. A. Frank, B. Lites, and D. Elmore, 2007: Formation of Moving Magnetic Features and Penumbra Magnetic Fields with Hinode/SOT. *PASJ*, **59**, S607–S612.
57. Jurčák, J., L. Bellot Rubio, K. Ichimoto, Y. Katsukawa, B. Lites, S. Nagata, T. Shimizu, Y. Suematsu, T. D. Tarbell, A. M. Title, and S. Tsuneta, 2007: The Analysis of Penumbra Fine Structure Using an Advanced Inversion Technique. *PASJ*, **59**, S601–S606.
58. Ichimoto, K., R. A. Shine, B. Lites, M. Kubo, T. Shimizu, Y. Suematsu, S. Tsuneta, Y. Katsukawa, T. D. Tarbell, A. M. Title, S. Nagata, T. Yokoyama, and M. Shimojo, 2007: Fine-Scale Structures of the Evershed Effect Observed by the Solar Optical Telescope aboard Hinode. *PASJ*, **59**, S593–S599.
59. Kitai, R., H. Watanabe, T. Nakamura, K. Otsuji, T. Matsumoto, S. Ueno, S. Nagata, K. Shibata, R. Muller, K. Ichimoto, S. Tsuneta, Y. Suematsu, Y. Katsukawa, T. Shimizu, T. D. Tarbell, R. A. Shine, A. M. Title, and B. Lites, 2007: Umbral Fine Structures in Sunspots Observed with Hinode Solar Optical Telescope. *PASJ*, **59**, S585–S591.
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