

# Publications

## John B. Rice

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- Khokhlova, V., Rice, J.B. and Wehlau, W.H. The Distribution of Chemical Elements Over the Surface of the Magnetic Ap Star Theta Aurigae. *Ap. J.* 307, 768-776, 1986
- Rice, J. B. and Hill, G. A Technique for surveying F stars for chemical Peculiarities Using Wavelength - coincidence - statistics *P.A.S.P.* 100, 73-81, 1988
- Rice, J. B. The Rare Earth Maximum of The Long Period Ap Star HR465 *Astronomy & Astrophysics* 199, 299-303, 1988
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- Rice, J.B. and Wehlau, W.H. Distribution of elements in rings on the surfaces of epsilon UMa and theta Aur. *Astronomy & Astrophysics* 233, 503, 1990.
- Rice, J.B. Uncertainties in Abundance Determination with Doppler Imaging *Astronomy & Astrophysics*, 245, 561-566, 1991.
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Strassmeier, K.G., Lupinek, S., Dempsey, R.C. and Rice, J.B., Doppler imaging of stellar surface structure X. The FK Comae-type star HD 199178 = V1794 Cygni, *Astronomy and Astrophysics*, 347, 225-234, 1999

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Rice, J.B., Holmgren, D.E. and Bohlender, D. The distribution of oxygen on the surface of the Ap star  $\theta$  Aur: An abundance Doppler image to compare with  $\epsilon$  UMa. Astronomy and Astrophysics 424,237-244, 2004

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Strassmeier, K.G. and Rice, J.B. Erratum: A High-Resolution Spectrum of the TrES-1 Parent Star, IAU Information Bulletin on Variable Stars (IBVS 5648) September 8, 2005

Strassmeier, K.G., Rice, J.B., Ritter, A., Kuker, M., Hussain, G., Hubrig, S. and Shobbrook, R.R. Spatially resolving the accretion shocks on the rapidly-rotating M0 T-Tauri star MN Lupi. Astronomy and Astrophysics 440,1105-1118, 2005.

Kovari, Zs., Bartus, J., Strassmeier, K., Weber, M., Washuettl, A., Rice, J.B., Csiznodia, S. Doppler Images of Zeta Andromedae. Ap&SS 304, no. 1, 375-377, 2006

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Strassmeier, K.G., Carroll, T., Rice, J.B. and Savanov, I.S. Resolving stellar surface spots Mem. S.A.It 75, 282-288, 2007

Bohlender, D.A., Rice, J.B. and Hechler, P., Doppler imaging of the helium-variable star  $\alpha$  Centauri, Astronomy and Astrophysics 520,A44,2010

Strassmeier, K. G. Granzer, T. Kopf, M. Weber, M. Kuker, M. Reegen, P. Rice, J.B. Matthews, J.M. Kuschnig, R. Rowe, J.F. Guenther, D.B. Moffat, A.F.J. Rucinski, S.M. Sasselov, D. and Weiss, W.W., Rotation and magnetic activity of the Hertzsprung-gap giant 31 Comae, Astronomy and Astrophysics 520,A52,2010

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Magnetic Activity? Time-series echelle spectroscopy and photometry of HD 123351 = CZ CVn  
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Carroll, T.A., Strassmeier,K.G.,Rice,J.B. and Kuenstler,A, The Magnetic field topology of the weak-lined T Tauri star V410 Tau. New strategies for Zeeman-Doppler imaging. Astronomy and Astrophysics 548, A95,2012

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### Invited Papers:

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Wehlau, W.H., Rice, J.B. and Khokhlova, V.C. Mapping the Surfaces of Ap stars by Doppler Imaging. Commission 29, International Astronomical Union General Assembly, Baltimore, August 1988.

Wehlau, W. and Rice, J. 1992, Zeeman Doppler Imaging published in *Peculiar vs Normal Phenomena in A-type and Related Stars*, IAU Colloquium 138. Astronomical Society of the Pacific Conference series Volume 44, 247-257,1993.

Rice, J.B. Doppler Imaging of Stellar Surfaces, IAU Symposium 176, Vienna, October 1995, published as IAU Symposium 176 on Stellar Surface Structure, Strassmeier and Linsky ed., Kluwer Pub. Pgs 19-33, 1996

Rice, J.B. Doppler imaging of stellar surfaces - techniques and issues, Invited review at the First Potsdam Thinkshop on Starspots and Sunspots, Potsdam May 6-10,2002. Published in *Astronomische Nachrichten* 323, 220-235, 2002

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### Colloquia and Papers Presented:

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Strassmeier, K.G., Carroll, T., Rice, J.B. and Savanov, I.S. Resolving Stellar Surfaces. Mem. S.A.It, 75,282-288, 2007

Rice, J.B. and Strassmeier, K.G. Multi-line Doppler Imaging: Getting the most out of your echelle. Proceedings of the 14th Cool Stars meeting, Pasadena, Poster Session I and poster CD with PASP publication of proceedings. November 6-10, 2006

Kovari, Zs.,Bartus, J.,Olah, K.,Strassmeier, K.G.,Rice, J.B.,Weber,M., Forgacs-Dejka,E., Doppler Imaging of Stars with Roche-geometry, Binary Stars as Critical Tools and Tests in Contemporary Astrophysics, Edited by Hartkopf,W., Harmanec, P., and Guinan, E., Proceedings of IAU Symposium 240, no.108, 2006

Kovari, Zs., Bartus, J., Strassmeier, K.G., Olah, K., Rice, J.B., Washuettl, A., Csizmodia, Sz. First Doppler Images of Zeta Andromedae, 13th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun. Hamburg, Germany 5-9 July, 2004. ESA SP-560 page 727ff, 2005

Wahlgren, G.M., Ivarsson, S., Johansson, S., Proffitt, C.R., Adelman, J., Rice, J., Gulliver, A.F., Hill, G., Leckrone, D.S., Smith, D.P. Line Absorption in the FUSE spectrum of the CP star 17 Com A Bulletin of the American Astronomical Society 35 no.5 (93.03) AAS meeting January 2004

Strassmeier, K.G., Hofmann, A., Woche, M., Rice, J.B., Keller, Ch., Piskunov, N.E. and Pallavicini, R. The PEPSI spectro-polarimeter for the LBT. In Polarimetry in Astronomy, edited by Silvano Francheschi. Proceedings of the SPIE , 4843, 180-189, 2003

Strassmeier, K.G., Pallavicini, R., Rice, J.B., Zerba, F., Catalano, S., Keller, Ch., Hofmann, A., Woche, M., Andersen, M.I., Fechner, T., Storm, J., Dionies, F., Conconi, P., Molinari, E., Mazzoleni, R., Spano, P., Leone, F., Bonanno, G., Wolter, D., Granzer, T., Weber, M. and Weshuettl, A. PEPSI with ICE Echelle spectropolarimeter for the LBT: A high-resolution adaptive-optics spectropolarimeter for the Large Binocular Telescope. Conference Proceedings: 1st Potsdam Thinkshop on Starspots and Sunspots, page 17-20, 2002

Strassmeier, K.G., Rice, J.B., Weber, M. & Washuettl, A. Doppler imaging from combined spectra: application to  $\sigma^2$  CrB. in Conference Proceedings: 1st Potsdam Thinkshop on Sunspots and Starspots, page 61-64, 2002

Kovari, Zs., Strassmeier, K.G., Weber, M., Granzer, T., Rice, J.B. Long-term Photometric Cycles and Short-term Starspot Evolution on LQ Hya. in Conference Proceedings: 1st Potsdam Thinkshop on Sunspots and Starspots, page 69-71, 2002

Strassmeier, K.G., Rice, J.B., Granzer, T., Weber, M. Temperature surface imaging as a tracer of stellar magnetic fields, ESO sponsored international meeting on Magnetic Fields Across the Hertzsprung-Russell Diagram, Santiago, Chile ASP Conference Series, 248, 223-233, 2001

Rice, J.B. and Holmgren, D.E. The Distribution of Calcium on the Surface of Epsilon UMa: An Abundance Distribution Doppler Image, Canadian Astronomical Society, May 26-28, 2000, Vancouver, BC.

Strassmeier, K.G., Rice, J.B. Doppler imaging of the young single, solar-type stars LQ Hya and HD 129333, Tenth Workshop on Cool Stars, Stellar Systems and the Sun, July 13-19, 1997 (Cambridge, MA, USA)

Rice, J.B. Doppler Imaging, High Spectral Resolution to High Geometric Resolution, Proceedings of the Fourth CFHT Users Meeting p. 106-111, May 1995, Lyon, France Canada-France-Hawaii Telescope Corp. Publ.

Wehlau, W.H., Rice, J.B., Bastien, P., Moffat, A. and Piskunov, N. A High resolution Spectropolarimeter, Canadian Astronomical Society, May 1994, London, Ontario

Matthews, J.M., Wehlau, W.H., Rice, J.B. and Walker, G.A.H. Opening a New Window on Ap Star Atmospheres. Canadian Astronomical Society, May 1994, London, Ontario

Rice, J. and Wehlau, W. Doppler Imaging of the Ap Star 84 UMa. Canadian Astronomical Society,

June 1993, Victoria, B.C. and  
Wehlau, W. and Rice, J. Doppler Imaging of the Ap Star 84 UMa. American Astronomical Society,  
June 1993, Berkeley, CA

Matthews, J.M., Wehlau, W.H., Rice, J.B. and Walker, G.A.H. Atmospheric Structure of Pulsating Ap (CP<sub>2</sub>) Stars From Rapid Multicolour Photometry. IAU Colloquium 137 "Inside the Stars" Vienna April 1992.

Wehlau, W.H. and Rice, J.B., the Ranges of Abundances of Iron, Chromium and Silicon on epsilon UMa and Theta Aur. Canadian Astronomical Society, Toronto, June 1991.

Wehlau, W.H. and Rice, J.B., "Surface Features on Ap stars", Commission 36, IAU General Assembly, Buenos Aires, July 1991.

Hackmann, T.; Hatzes, A.; Piskunov, N.; Poutanen, P.; Rice, J.; Strassmeier, K.; Tuominen, I.; Vogt, S. and Wehlau, W. Mapping Surface Structures on EI Eri, IAU Colloquium #130 on "The Sun and Cool Stars" Helsinki, July 1990.

Rice, J.B.; Wehlau, W.H. and Khokhlova, V. Mapping Stellar Surfaces by Doppler Imaging, Canadian Astronomical Society, June 1988, Peterborough, Ontario.

Rice, J.B. Doppler Imaging of Ap Stars: The Problem and Results for  $\epsilon$  UMa University of Western Ontario, Astronomy Department Colloquium, February 1988, also Brandon University Science Seminar, October 1988.

Rice, J.B. Doppler Imaging of Ap Stars, The History. University of Montreal, January 1986.

Rice, J.B. Chemically Peculiar Stars: New Tools Allow Slow Progress on an Old Problem. University of Manitoba Physics Colloquium, November 1985, Winnipeg, Manitoba.

Rice, J.B. "Comments on Small University Representation on the NSERC Council", at the Research in Small Universities Conference, Laurentian University, Sudbury, April 1987.

Rice, J.B. Panel Presentation on "Research in a Small Rural University" at the Conference "Brandon University: Challenges Facing a Small Undergraduate Institution", November 1985, Brandon University.

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### **Book Reviews:**

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Webb Society Deep-Sky Observers' Handbook (Vol. 11, Planetary and Gaseous Nebulae), J.R.A.S.C. 73, # 6, 388-390, 1979

New Horizons in Astronomy (2nd Ed), J.C. Brandt and S.P. Maran, J.R.A.S.C. 74, # 1, 43-45, 1980

Reports on Astronomy - Transactions of the International Astronomical Union, Vol. 18A, P.A.



Wayman, J.R.A.S.C. 77, # 3, 1983

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**OBSERVING TIME:**

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Canada-France-Hawaii Telescope 1981, 1982, 1989, 1990, 1991, 1993, 1995, 1996, 1997, 1998, 2000, 2004, 2008

Cerro Tololo Interamerican 1991 (1.0 and 1.5 metre)

Dominion Astrophysical Observatory, many times on both 1.2 m and 1.8 m

FUSE (Far Ultraviolet Satellite)