CURRICULUM VITA STEVEN LOUIS KIPP

PROFESSOR, DEPARTMENT OF PHYSICS AND ASTRONOMY, MINNESOTA STATE UNIVERSITY, MANKATO

CONTACT INFORMATION:

208 Essex Road, Mankato, Minnesota 56001 507-389-5912(office) 507-387-4864(home) steven.kipp@mnsu.edu http://mavdisk.mnsu.edu/stars/

EDUCATION:

Ph. D. in Astronomy, University of Pittsburgh, 1980. Dissertation topic: "A Derivation of the Stellar Luminosity Function in the Direction of the South Galactic Pole Based on a Statistical Approach to Stellar Kinematics".

M.A. in Astronomy, Wesleyan University, Middletown, Connecticut, 1977. Thesis topic: "The Stellar Luminosity Function and the Method of Mean Absolute Magnitudes".

B.A. with Distinction in Physics and Astronomy, University of Virginia, 1970.

POSITIONS AND EXPERIENCE:

Present Professor, Department of Physics and Astronomy, Minnesota State University, Mankato, Minnesota.

1980 - 1981 Investigator, Centro de Investigacion de Astronomia (CIDA), Merida, Venezuela.

1978 - 1980 Daniel Fellow in Astronomy, University of Pittsburgh.

1976 - 1978 Graduate Research Assistant, Allegheny Observatory, University of Pittsburgh.

1977 -1979 Frick Public Evening Lecturer, Allegheny Observatory.

1974 -1976 Graduate Assistant, Department of Astronomy, Wesleyan University.

1974 Summer Research Assistant, Goddard Space Flight Center.

PROFESSIONAL MEMBERSHIPS: American Astronomical Society, Sigma Pi Sigma, Sigma Xi, Royal Astronomical Society of Canada, American Association of Variable Star Observers

AWARDS: Faculty Merit Award, College of Natural Sciences, Mathematics and Home Economics, 1991

AREAS OF INTEREST: Galactic Structure, Astrometry, CCD Techniques.

GRANTS:

MSU IPELS (Initiative to Promote Excellence in Student Learning) Grant, with J. Buchanan and M. Frappier, 2006, \$5000.

MnSCU Center for Teaching and Learning, 2001, "A Student Observational Research Project in Astronomy", \$9,560.

Faculty Research Grant, 1993, "Precision CCD Photometry of Long period Variable Stars", \$2,195.

NSF Instrumentation and Laboratory Improvement Program, 1990, "A CCD Camera System for Photometric and Astrometric Applications", \$12,497.

Wrote Kresge grant proposal which resulted in \$230,000 private donation for Observatory, 1989.

NSF, College Science Instrumentation, 1986, "A Professional Quality Teaching Telescope", \$50,000.

Faculty Research Grant, 1982, "Multicolor Photometry of Variable Stars", \$1495.

TECHNICAL PUBLICATIONS:

"Rotational Periods of Asteroids 1165 Imprinetta, 1299 Mertona, 1645 Waterfield, 1833 Shmakova, 2313 Aruna, and (13856) 1000 XZ105", *The Minor Planet Bulletin*, Vol. 31, 2004. (with A. Monson)

"Rotational Periods of Asteroids 34, 239, 759. and 963", *The Minor Planet Bulletin*, 30, 2003, 59-61. (with B. Uzpen)

"The Light Curve of SN 1993J", *Bulletin of the American Astronomical Society*, 26, 953, 1994.

"Deconvolution of the Distribution of Observed Parallaxes", *Bulletin of the American Astronomical Society*, 21, 1126, 1989.

"The Luminosity Function at the North and South Galactic Poles", *Proceedings of IAU Colloquium No. 76*, 1983.

"The Stellar Luminosity Function at the Galactic Poles, *Bulletin of the American Astronomical Society*, 13, 539, 1981.

"A Derivation of the Stellar Luminosity Function in the Direction of the South Galactic Pole by a Statistical Method", *Revista Mexicana de Astronomia y Astrofisica*, 6, 95-98, 1981.

"On the Astrometric Detection of Neighboring Planetary Systems II", *Icarus*, 41, 205, 1979. (with G. Gatewood, L. Breakiron, R. Goebel, J. Russell and J. Stein)

"Astrometric Studies of 45 Tauri, 97 Tauri, 102 t Tauri, 31 o2 Cygni and Selected Stars in Those Regions", *Astronomical Journal*, 83, 636,1978. (with Lee A. Breakiron, Jane Russell and John Stein)

"Astrometric Constants for 18 Puppis, BD+44° 1847, Lalande 26325, G137-8 and Selected Reference Stars", *Astronomical Journal*, 83, 305, 1978. (with Jane Russell)

"Long-Term Infrared Monitoring of Stellar Sources from Earth Orbit", *Infrared Physics*, 17, 565, 1977. (with S. P. Maran, T. F. Heinsheimer, T. L. Stocker, S. P. S. Anand, R. D. Chapman, R. W. Hobbs, A. G. Michalitsanos and F. H. Wright)

"Atmospheric Turbulence and the Apparent Instantaneous Diameter of the Sun", *Astronomy and Astrophysics*, 59, L27, 1977. (with C. KenKnight, G. D. Gatewood and D. Black)

POPULAR PUBLICATIONS:

Radio scripts for *Insights and Outlooks* (1981-1988):

"Astrology Reconsidered - and Rejected", "Pluto and Planet X", "The Search for Planet X - Again", "Does the Sun Have a Companion Star?", "The Mystery of the Missing Neutrinos", "Whatever Happened to the Jupiter Effect?", " Star Colours", "The Return of Halley's Comet", "Let There Be Darkness", "Why the Sun Shines", "Watch for the Perseids!", "In Pursuit of the Correct Answers to 'Trivial' Questions About Astronomy","Why the Sky is Blue", "Sizing-up the Solar System", "Mysterious Uranus", "Once in a Blue Moon".

Almost three dozen scripts for *Starline* (recorded presentation) were written from 1986-1991. A *Starline* newspaper column in the Mankato *Free Press* appeared from 1995 to 2005. Four children's books on planets were published in 1998.

PAPERS PRESENTED:

"Expedition to the Galactic Pole", MSU Physics Department Colloquium, March 31, 2005.

"Deconvolution of the Distribution of Observed Parallaxes", AAS, Washington D.C., January 1990.

"The Light Curve of SN 1993J", AAS, Minneapolis, June 1994.

"The Luminosity Functions at the North and South Galactic Poles", IAU Coll. at Wesleyan University, 1983.

"The Luminosity Function at the Galactic Poles", AAS, Calgary, June, 1981.

"The Luminosity Function at the South Galactic Pole", IAU Latin American Regional Meeting, 1980.

PROFESSIONAL MEETINGS:

Photometrics Performance Imaging Workshop, Tucson, January 25-26, 1996.

School for Learning Astronomical CCD Techniques, Tucson, December, 1991.

175th Meeting of the AAS, Washington, D,C,, 1989.

168th Meeting of the AAS, Ames, Iowa, June 1986.

166th Meeting of the AAS, Charlottesville, Virginia, June, 1985.

162th Meeting of the AAS, Minneapolis, June, 1983.

IAU Colloquium No. 76, Middletown, Connecticut, June, 1983.

158th Meeting of the AAS, Calgary, Canada, June, 1981.

RESEARCH SUPERVISED:

Andrew Monson, 2004, MSU Undergraduate Research Conference, "Rotation periods of Asteroids".

Brian Uzpen, 2003, Masters' Thesis, "Photometric Determination of Asteroid Rotation Periods and Positions".

Jeff Burkett, Ian Radke, Lucy Mcdermond, Andrew Monson, MSU Undergraduate Research Conference, 2002, "Calibration of CCD Photometry at Andreas Observatory".

Tom Marks, 2000, MSU Undergraduate Research Conference, "Monte Carlo Simulations of Lutz-Kelker Corrections".

Tom Marks, 1999, MSU Undergraduate Research Conference, "Detection of H α Stellar Emission".

Andreas Veh, 1994, MSU Masters' Thesis, "The Light curve of the Mira Variable V369 Cyg and Periodicity Analysis of Its AAVSO Data".

Ren Xiaoqang, MSU Alternate Plan Paper, Statistical Analysis of Star Positions on a CCD Image taken with the 5.5 - inch Schmidt Telescope of Andreas Observatory, 1993.

COURSES TAUGHT IN PAST 5 YEARS:

Astronomy 101, Introduction to Astronomy Astronomy 102, Planetary Astronomy Astronomy 115, Life in the Universe Astronomy 201, Spherical Astronomy Astronomy 215, Astronomy & Astrophysics I Astronomy 225, Astronomy & Astrophysics II Astronomy 353, Photometry I Astronomy 355, Astrometry Astronomy 430, Galactic Structure Honors 450, Seminar, Variable Topics

TEACHING ASSIGNMENTS FOR THE PAST 5 YEARS:

Course	Semester	Credits
	Summer 2008	
Astronomy Astronomy	101-01 115-01	3 2
	Spring 2007-08	
Astronomy Astronomy Astronomy Astronomy Astronomy Astronomy TOTAL	101-02 101-01 101-04 115-01 115-60 201-01 355-01 Fall 2007-08	3 3 2 2 2 2 17
Astronomy Astronomy Astronomy Astronomy TOTAL	101-02 102-01 115-02 115-60 430-01	3 2 2 3 13

Summer 2007 Astronomy 101-01 Astronomy 115-01	3 2
Spring 2006-07 Astronomy 101-02 Astronomy 101-04 Astronomy 201-01 Astronomy 225-01 Honors 201/401 TOTAL	3 3 4 2 14
Fall 2006-07 Astronomy 101-02 Astronomy 115-01 Astronomy 115-60 Astronomy 215-01 Astronomy 353-01 TOTAL	3 2 4 3 14
Summer 2006 Astronomy 101-03 Astronomy 115-01	
Spring 2005-06 Astronomy 101-02 Astronomy 101-04 Astronomy 115-02 Astronomy 201-01 Astronomy 355-01 TOTAL	3 3 2 2 2 12
Fall 2005-06 Astronomy 101-02 Astronomy 101-04 Astronomy 115-02 Astronomy 430-01 Honors 201-07 TOTAL	3 3 2 3 2 13

Astronomy Astronomy	Summer 2005 101-02 115-01	3 2
Astronomy Astronomy Astronomy Astronomy Astronomy TOTAL	Spring 2004-05 101-03 115-02 115-60 201-01 225-01	3 2 2 2 4 13
Sabbatical	Fall 2004-05	
Astronomi	Summer 2004	2
Astronomy	115-01	2
Astronomy Astronomy Astronomy Astronomy Astronomy TOTAL	Spring 2003-04 101-03 101-04 102-01 115-02 201-01	3 3 2 2 13
Astronomy Astronomy Astronomy Astronomy Honors-450 TOTAL	Fall 2003-04 101-02 115-02 353-01 430-01	3 2 3 2 12

SERVICE HISTORY PAST 5 YEARS:

Tours and programs at Andreas Observatory 2003-2008.

Recreation Master Plan Committee, 2007-2008.

Consultant to Miller Lighting Committee, 2006.

Worked to identify, purchase, mount, dedicate and test a new astrographic telescope for Andreas Observatory, 2006-2008.

Department Astronomy Library Representative 2003, 2007.

Department Graduate Committee Member, 2004-2007.

Department Equipment Committee Member, 2004-2007.

Master's Thesis Committee Member for Clinical Psychology student, 2008.