

Charles Figura

Curriculum Vitæ

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Education

- 1997–1999 **Doctorate of Philosophy, Physics**, *Virginia Polytechnic Institute and State University (Virginia Tech)*, Blacksburg, VA.
- 1993–1995 **Master of Science, Physics**, *Virginia Polytechnic Institute and State University (Virginia Tech)*, Blacksburg, VA.
- 1988–1992 **Bachelor of Science, Physics**, *Bradley University*, Peoria, IL.

Doctoral Thesis

- 1999 *Second-Order Non-Linear Optics in Ionically Self-Assembled Thin Films*
Advisor James R. Heflin

Research Interests

- Triggered Star Formation in Bright-Rimmed Clouds
- Comet/Minor Planet Astrometry and Photometry
- Development of Undergraduate Physics Laboratory Exercises
- Low-cost Stereographic Projection for the Classroom
- Second-Order Non-Linear Optics in Polymer Thin Films

Academic Employment

- 2005–Present **Director, Wartburg-Platte Observatory**, *Wartburg College*, Waverly, IA.
- 1999–Present **Professor of Physics and Astronomy**, *Wartburg College*, Waverly, IA.
(1999 Assistant Professor, 2005 Associate Professor)
- 1993–1999 **Teaching Assistant in Physics**, *Virginia Tech*, Blacksburg, VA.

Courses Taught

(current plus most recent 5 years. Wartburg load is 7 courses/year)

- 2011–2012 Physics: Electricity & Magnetism, Capstone, General Physics (I & II), Classical Physics II.
General Education: Astronomy, Science and Society
- 2010–2011 Physics: Topics in Astrophysics, Analytic Mechanics, General Physics (I & II). General
Education: Astronomy, Science and Society (x2)
- 2009–2010 Physics: Electricity & Magnetism, Capstone, General Physics (I & II). General Education:
Astronomy (x2), Science and Society

- 2008–2009 Physics: Analytic Mechanics, General Physics (I & II). General Education: Astronomy (x2), Science and Society (x3)
- 2007–2008 Physics: Topics in Astrophysics, Electricity & Magnetism, Capstone, General Physics (I & II). General Education: Astronomy (x2), Science and Society (x2)
- 2006–2007 Winter Term Sabbatical. Physics: Analytic Mechanics, General Physics I. General Education: Astronomy, Science and Society

Grants and Awards

- 2010 "*The RMS Survey: Probing the Environments of Young Massive Stars*", C.Figura. Grant to Support Scholarship (Wartburg College)
- 2008 "*Triggered Star Formation in Bright-Rimmed Clouds*", C.Figura. Grant to Support Scholarship (Wartburg College)
- 2005 "*Photometry of Minor Planets and Comets*", Erin Benoy, C. Figura. Summer Research Fellowship Grant (Wartburg College)
- 2003 "*Astrometry of Minor Planets at Selected Wavelengths and Advancement of Observation Techniques*", Benjamin Kalkwarf, C. Figura. Maytag Innovation Award for Student/Faculty Research
- 2003 "*An Investigation Into Thermal Stability and Adsorption Parameters of Ionically Self-Assembled Monolayer Films*", Lisa Lee, C. Figura. Maytag Innovation Award for Student/Faculty Research
- 2002 "*Astrometry of Unnumbered Asteroids and the Development of Observational Exercises for the Introductory- and Advanced-Level Astronomy and Astrophysics Classroom*", Amanda Hofer, Michael DeBower, C. Figura. Maytag Innovation Award for Student/Faculty Research
- 2000 "*Characterisation of Ionic Self-Assembled Monolayer Film Deposition as a Function of Substrate Material*", Angela Peters, C. Figura. Maytag Innovation Award for Student/Faculty Research
- 2000 "*Formation of Ionic Self-Assembled Monolayer Films*", C. Figura. Grant to Support Scholarship (Wartburg College)

Professional Development

- Summer 2005 Chatauqua Short Course: "*A Radio View of the Universe and the New Green Bank Telescope*", Green Bank, WV
- Summer 2002 Chatauqua Short Course: "*Interferometry in Radio Astronomy, the VLA and the VLBA*", Socorro, NM
- Summer 2002 Chatauqua Short Course: "*A Radio View of the Universe and the New Green Bank Telescope*", Green Bank, WV
- Summer 2001 Summer Workshop: "*Contemporary Laboratory Exercises in Astronomy (CLEA)*", Gettysburg College, Gettysburg, PA

Professional Memberships

- American Astronomical Society

- American Association of Physics Teachers
- American Association of University Professors

Publications

Proceedings

C. C. Figura, L. K. Morgan, M. A. Thompson, J. S. Urquhart, and T. J. T. Moore. Using The Herschel Hi-GAL Survey And The RMS Survey To Characterise Triggered Star Formation In Galactic Bubbles. In *American Astronomical Society Meeting Abstracts #219*, volume 219 of *American Astronomical Society Meeting Abstracts*, page 341.11, January 2012.

C. C. Figura, L. K. Morgan, T. Moore, and J. S. Urquhart. Molecular Kinematics Tracers in Bright-Rimmed Cloud SFO14. In *American Astronomical Society Meeting Abstracts*, volume 217 of *American Astronomical Society Meeting Abstracts*, pages 411.04–+, January 2011.

C. C. Figura, L. K. Morgan, and J. S. Urquhart. Observations of Turbulence in Triggered Star Forming Regions. In *American Astronomical Society Meeting Abstracts*, volume 215 of *American Astronomical Society Meeting Abstracts*, pages 414.23–+, January 2010.

C. C. Figura, L. K. Morgan, and J. S. Urquhart. Probing Bright-Rimmed Clouds Through Ammonia Inversion Transitions. In *Bulletin of the American Astronomical Society*, volume 41 of *Bulletin of the American Astronomical Society*, pages 399–+, January 2009.

B. Bousquet and C. Figura. Modeling a Water Balloon Slingshot in the Introductory Physics Laboratory. In *American Association of Physics Teachers (AAPT) Summer Meeting*, American Association of Physics Teachers (AAPT) Summer Meeting, 2009.

C. C. Figura, L. Morgan, and J. Urquhart. Externally Influenced Evolution in Bright-Rimmed Cloud SFO 14. In *Bulletin of the American Astronomical Society*, volume 38 of *Bulletin of the American Astronomical Society*, pages 883–+, December 2007.

L. Morgan, J. Urquhart, M. Thompson, G. White, and C. Figura. Varied Mechanisms for Star Formation in Bright-Rimmed Clouds. In *Bulletin of the American Astronomical Society*, volume 38 of *Bulletin of the American Astronomical Society*, pages 880–+, December 2007.

S. Hynes, R. J. Maddalena, and C. Figura. Research Experience for Teachers at Green Bank: High-Precision Calibration, Baselines and Nonlinearities with the GBT. In *Bulletin of the American Astronomical Society*, volume 38 of *Bulletin of the American Astronomical Society*, pages 1015–+, December 2006.

C. Figura. Civic Engagement in the Classroom: A Course in Scientific Reasoning. In *American Association of Physics Teachers (AAPT) Winter Meeting*, volume 128 of *American Association of Physics Teachers (AAPT) Winter Meeting*, 2004.

C. Figura and J. Zelle. Classroom Virtual Reality: Simple, Affordable Stereoscopic Visualization for Everyone. In *American Association of Physics Teachers (AAPT) Winter Meeting*, volume 128 of *American Association of Physics Teachers (AAPT) Winter Meeting*, 2004.

J. Griffith, M. Birgen, J. Gremmels, and C. Figura. Poster on IS101. In *Best Practices in General Education and Its Assessment, AAC&U*, Best Practices in General Education and Its Assessment, AAC&U, 2001.

C. Figura, P. J. Neyman, D. Marciu, C. Brands, M. A. Murray, S. Hair, R. M. Davis, M. B. Miller, and J. R. Heflin. Thermal stability and immersion solution dependence of second-order nonlinear optical ionically self-assembled films. In D. D. Bradley & B. Kippelen, editor, *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 3939 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, pages 214–222, May 2000.

- C. Figura, P. J. Neyman, D. Marciu, C. Brands, M. A. Murray, S. Hair, M. B. Miller, R. M. Davis, and J. R. Heflin. Control of second order nonlinear optical susceptibility in ionically self-assembled films by pH and ionic strength. In *Material Research Society (MRS) Symposium Proceedings*, volume 598 of *Material Research Society (MRS) Symposium Proceedings*, pages BB4.9.1–6, 2000.
- C. Figura, D. Marciu, Y. Liu, Y. X. Wang, K. Lenahan, R. O. Claus, and J. R. Heflin. Thermal Stability of Ionically Self-Assembled Second Order Nonlinear Optical Thin Films. In *Organic Thin Films for Photonics Applications*, American Chemical Society Annual Meeting, 1998.
- J. R. Heflin, Y. Liu, C. Figura, D. Marciu, and R. O. Claus. Second-order nonlinear optical thin films fabricated from ionically self-assembled monolayers (Invited Paper) [3147-40]. In M. G. Kuzyk, editor, *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 3147 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, pages 10–+, October 1997.
- J. R. Heflin, D. Marciu, C. Figura, S. Wang, R. Yordanov, and J. C. Withers. Optical limiting over an extended spectral region by derivatization of C60 (Invited Paper) [3146-18]. In C. M. Lawson, editor, *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 3146 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, pages 142–+, October 1997.
- J. R. Heflin, Y. Liu, C. Figura, D. Marciu, and R. O. Claus. Noncentrosymmetric Ionically Self-Assembled Thin Films for Second Order Nonlinear Optics. In *Organic Thin Films for Photonics Applications*, Optical Society of America Annual Meeting, 1997.
- J. R. Heflin, D. Marciu, C. Figura, S. Wang, P. Burbank, S. Stevenson, and H. C. Dorn. Enhanced nonlinear Optical Response of an Endohedral metallofullerene through Metal-to-Cage Charge Transfer. In *Quantum Electronics and Laser Science*, 1997.
- J. R. Heflin, D. Marciu, C. Figura, S. Wang, R. Yordanov, and J. C. Withers. Tunable Visible and Near-Infrared Optical Limiting in Fullerenes and Fullerene-Related Materials (Invited Paper). In *Nonlinear Optical Liquids and Power Limiters*, SPIE International Symposium on Optical Science, Engineering, and Instrumentation, 1997.
- J. R. Heflin, D. Marciu, S. Wang, C. Figura, and R. Yordanov. Dispersion of Optical Limiting of C₆₀, C₆₀ Charge Transfer Complexes, and higher Fullerenes (Invited Paper). In *International Symposium on the Science and Technology of Atomically Engineered Materials*, 1997.
- D. Marciu, C. Figura, S. Wang, and J. R. Heflin. Enhanced Degenerate Four-Wave Mixing in an Endohedral Metallofullerene through Metal-to-Cage Transfer. In *Organic Thin Films for Photonics Applications*, Optical Society of America Annual Meeting, 1997.
- J. R. Heflin, D. Marciu, C. Figura, S. Wang, P. Burbank, S. Stevenson, H. C. Dorn, and J. C. Withers. Degenerate four-wave mixing in endohedral metallofullerenes and optical limiting of C60 derivatives and higher fullerenes. In Z. H. Kafafi, editor, *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 2854 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, pages 162–173, December 1996.
- J. R. Heflin, C. Figura, D. Marciu, S. Wang, R. Yordanov, and J. C. Withers. Near-Infrared Optical Limiting of C₆₀ Derivatives and Higher Fullerenes. In *Conference on Lasers and Electro-Optics*, Conference on Lasers and Electro-Optics, 1996.
- J. R. Heflin, S. Wang, D. Marciu, C. Figura, and R. Yordanov. Optical limiting of C60, C60 charge-transfer complexes, and higher fullerenes from 532 to 750 nm. In Z. H. Kafafi, editor, *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 2530 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, pages 176–187, December 1995.

J. R. Heflin, D. Marciu, S. Wang, C. Figura, and R. Yordanov. Wavelength Dependence of Optical Limiting in C₆₀, C₆₀ Charge Transfer Complexes, and Phthalocyanines. In *Conference on Lasers and Electro-Optics*, Conference on Lasers and Electro-Optics, 1995.

Articles

J. S. Urquhart, L. K. Morgan, C. C. Figura, T. J. T. Moore, S. L. Lumsden, M. G. Hoare, R. D. Oudmajer, J. C. Mottram, B. Davies, and M. K. Dunham. Red MSX water maser and ammonia emissions (Urquhart+, 2011). *VizieR Online Data Catalog*, 741:81689, February 2012.

J. S. Urquhart, L. K. Morgan, C. C. Figura, T. J. T. Moore, S. L. Lumsden, M. G. Hoare, R. D. Oudmajer, J. C. Mottram, B. Davies, and M. K. Dunham. The RMS Survey: Ammonia and water maser analysis of massive star forming regions. *ArXiv e-prints*, July 2011.

L. K. Morgan, C. C. Figura, J. S. Urquhart, and M. A. Thompson. Ammonia observations of bright-rimmed clouds: establishing a sample of triggered protostars. *Monthly Notices of the Royal Astronomical Society*, 408:157–169, October 2010.

J. Zelle and C. Figura. Simple, low-cost stereographics: Vr for everyone. *SIGCE Bulletin*, V36(1):348–352, 2004.

C. Brands, P. J. Neyman, M. T. Guzy, S. Shah, H. Wang, H. W. Gibson, K. E. Van Cott, R. M. Davis, C. Figura, and J. R. Heflin. In situ second harmonic generation measurements of the growth of nonlinear optical ionically self-assembled monolayers. *Proc. of Polymeric Materials*, 83:219–220, 2000.

P. J. Neyman, M. T. Guzy, S. Shah, H. Wang, H. W. Gibson, K. E. Van Cott, R. M. Davis, C. Figura, and J. R. Heflin. Second order nonlinear optical properties of ionically self-assembled films containing dianionic chromophores. *Proc. of Polymeric Materials*, 83:187–187, 2000.

J. R. Heflin, C. Figura, D. Marciu, Y. Liu, and R. O. Claus. Thickness dependence of second-harmonic generation in thin films fabricated from ionically self-assembled monolayers. *Applied Physics Letters*, 74:495–+, January 1999.

J. R. Heflin, Y. Liu, C. Figura, D. Marciu, and R. O. Claus. Thickness-dependence of second harmonic generation in thin films fabricated from self-assembled monolayers. *Appl. Phys. Lett.*, 74(4):495–497, 1999.

J. R. Heflin, D. Marciu, C. Figura, S. Wang, P. Burbank, S. Stevenson, and H. C. Dorn. Enhanced nonlinear optical response of an endohedral metallofullerene through metal-to-cage charge transfer. *Applied Physics Letters*, 72:2788–+, June 1998.

C. Figura, D. Marciu, Y. Liu, Y. X. Wang, K. M. Lenahan, R. O. Claus, and J. R. Heflin. Thermal stability of ionically self-assembled second order nonlinear optical thin films. *Polymer Preprints*, 39(2):1126, 1998.

K. M. Lenahan, Y. Wang, Y. Liu, R. O. Claus, J. R. Heflin, D. Marciu, and C. Figura. Novel polymer dyes for nonlinear optical applications using ionic self-assembled monolayer technology. *Adv. Mater.*, 10:853, 1998.

J. R. Heflin, D. Marciu, S. Wang, C. Figura, and R. Yordanov. Long wavelength optical limiting of C_{60} , C_{60} charge-transfer complexes, C_{60} derivatives, and higher fullerenes. *Science and Technology of Atomically Engineered Materials*, pages 501–508, 1996.

Minor Planet Observations

C. Figura and B. Vachta. Minor Planet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 76019:3, September 2011.

C. Figura and B. Vachta. Minor Planet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 75287:6, June 2011.

C. Figura. Minor Planet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 5811:13–+, December 2006.

C. Figura and E. Benoy. Minor Planet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 5712:10–+, July 2006.

C. Figura and E. Benoy. Comet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 5655:1–+, April 2006.

S. Gajdos, J. Vilagi, W. Marinello, M. Micheli, G. Pizzetti, A. Soffiantini, D. Crespi, S. Foglia, G. Galli, S. Minuto, L. Buzzi, F. Luppi, K. Kadota, J. Young, M. Bezpalko, L. Manguso, D. Torres, R. Kracke, M. Blythe, H. Love, G. Spitz, J. Stuart, J. Kommers, H. Denzau, Y. Ohshima, C. Figura, E. Benoy, P. C. Sherrod, K. Levin, J. C. Pelle, and B. G. Marsden. Comet C/2006 CK10 (catalina). *Minor Planet Electronic Circulars*, pages 46–+, April 2006.

M. Lehky, S. Gajdos, J. Vilagi, R. Naves, M. Campas, W. Hasubick, E. Reina, M. Tichy, J. Ticha, K. Kadota, A. Asami, H. Abe, S. Wakuda, D. Herald, A. Sanchez, D. Rodriguez, K. Sarneczky, M. Jung, H. Bill, U. Quadri, L. Strabla, R. Girelli, C. Cremaschini, R. Bambery, M. Hicks, K. Lawrence, E. Helin, R. Thicksten, M. Bezpalko, L. Manguso, D. Torres, R. Kracke, M. Blythe, H. Love, J. Stuart, J. Kommers, D. T. Durig, M. M. White, M. S. Ortale, R. C. McNaughton, J. Castellano, J. R. Vidal, J. L. Salto, A. Salto, J. Barcelo, M. Casao, F. Morillas, S. Takbou, P. Kocher, H. Denzau, A. Vergara, F. Kugel, Y. Ohshima, Y. Sugiyama, E. J. Christensen, E. C. Beshore, G. J. Garradd, A. R. Gibbs, A. D. Grauer, R. E. Hill, R. A. Kowalski, S. M. Larson, R. H. McNaught, M. Nicholson, E. Guido, G. Sostero, J. Sue, C. Figura, P. C. Sherrod, J. Chumack, J. Garcia, J. P. Navarro Pina, S. Pastor, J. A. Reyes, P. Birtwhistle, and B. G. Marsden. Observations of Comets. *Minor Planet Electronic Circulars*, pages 8–+, April 2006.

M. Lehky, P. Horalek, S. Gajdos, J. Vilagi, A. Galad, W. Marinello, M. Micheli, G. Pizzetti, A. Soffiantini, D. Crespi, S. Foglia, G. Galli, S. Minuto, R. Haver, F. Porcellana, L. Buzzi, F. Luppi, R. Naves, M. Campas, E. Reina, R. Ligustri, J. Ticha, M. Tichy, K. Kadota, H. Abe, S. Wakuda, D. Herald, A. Sanchez, G. Masi, E. Guido, M. Gonano, V. Gonano, A. Lepardo, G. Sostero, M. Jung, H. Bill, R. Bambery, M. Hicks, K. Lawrence, E. Helin, R. Thicksten, J. Young, M. E. van Ness, R. E. Hill, R. A. Kowalski, A. R. Gibbs, E. C. Beshore, E. J. Christensen, G. J. Garradd, A. D. Grauer, S. M. Larson, R. H. McNaught, M. Bezpalko, L. Manguso, D. Torres, R. Kracke, M. Blythe, H. Love, G. Spitz, J. Stuart, J. Kommers, J. R. Vidal, F. Baldris, J. Barcelo, M. Casao, F. Morillas, C. Rodriguez, S. Takbou, H. Denzau, K. Hornoch, F. Fratev, R. Stanchev, E. Mihaylova, E. G. Basiglio Ribauda, Y. Ohshima, Y. Sugiyama, M. Nicholson, C. Figura, E. Benoy, P. C. Sherrod, K. Levin, J. C. Pelle, J. Garcia, S. Pastor, J. A. Reyes, J. Lacruz, P. Birtwhistle, and B. G. Marsden. Observations of Comets. *Minor Planet Electronic Circulars*, pages 51–+, April 2006.

C. Figura. Comet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 5613:33–+, March 2006.

C. Figura and E. Benoy. Minor Planet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 5616:9–+, March 2006.

S. Gajdos, J. Vilagi, W. Marinello, M. Micheli, G. Pizzetti, A. Soffiantini, M. Casali, D. Crespi, S. Foglia, G. Galli, S. Minuto, L. Buzzi, F. Luppi, R. Naves, M. Campas, K. Kadota, A. Asami, S. Wakuda, D. Herald, A. Sanchez, R. Bambery, M. Hicks, K. Lawrence, E. Helin, P. Kervin, J. Africano, R. Maeda, J. Young, R. S. McMillan, M. Block, A. S. Descour, M. E. van Ness, R. A. Kowalski, E. J. Christensen, A. P. Odell, E. C. Beshore, G. J. Garradd, A. D. Grauer, R. E. Hill, S. M. Larson, R. H. McNaught, A. R. Gibbs, M. Bezpalko, L. Manguso, D. Torres, R. Kracke, M. Blythe, H. Love, J. Stuart, J. Kommers, D. T. Durig, B. T. Scott, S. Takbou, A. Oksanen, M. Yang, C. S. Lin, C.-H. Hsia, Q. Ye, S. Shimomoto, M. Nicholson, C. Figura, D. Mendicini, R. Morales, J. L. Doreste, J. P. Navarro Pina, S. Pastor, J. A. Reyes, F. Montalban, T. Climent,

and B. G. Marsden. Observations of Comets. *Minor Planet Electronic Circulars*, pages 32–+, March 2006.

L. Tesi, G. Fagioli, M. Mazzucato, F. Dolfi, M. Tombelli, G. Forti, J. Manteca, R. Naves, M. Campas, E. Reina, H. Michels, M. Tichy, J. Ticha, A. S. Descour, K. Kadota, D. Herald, A. Sanchez, D. Rodriguez, G. W. Christie, A. A. Sabadell, R. Casas, R. Tucker, R. S. McMillan, M. E. van Ness, R. A. Kowalski, S. M. Larson, E. J. Christensen, A. R. Gibbs, E. C. Beshore, G. J. Garradd, A. D. Grauer, R. E. Hill, R. H. McNaught, M. Bezpalko, L. Manguso, D. Torres, R. Kracke, M. Blythe, H. Love, J. Stuart, J. Kommers, G. Hug, R. Salvo, D. T. Durig, T. G. Gao, J. E. McGaha, J. Castellano, J. R. Vidal, S. Takbou, H. Denzau, D. Levy, W. Levy, T. Glinos, J. A. Farrell, M. Nicholson, E. Guido, G. Sostero, W. K. Y. Yeung, C. Figura, D. Mendicini, J. P. Navarro Pina, S. Pastor, J. A. Reyes, T. Climent, and B. G. Marsden. Observations of Comets. *Minor Planet Electronic Circulars*, pages 16–+, March 2006.

C. Figura and E. Benoy. Minor Planet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 5498:7–+, October 2005.

E. Benoy and C. Figura. Comet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 5466:14–+, August 2005.

M. Lehky, M. Kreuzova, C. Cremaschini, S. Foglia, W. Marinello, M. Micheli, G. Pizzetti, A. Soffiantini, D. Crespi, G. Galli, S. Minuto, V. Sacco, E. Prosperi, L. Buzzi, R. Naves, M. Campas, E. Reina, A. Asami, D. Herald, A. Sanchez C., A. Boattini, E. Gregori, R. Leoni, A. di Paola, E. Dotto, R. Stoss, P. Korlevic, M. Hren, A. Cikota, L. Jerosimic, R. Bambery, M. Hicks, K. Lawrence, E. Helin, R. Thicksten, J. Young, M. Blythe, F. Shelly, M. Bezpalko, R. Huber, L. Manguso, D. Torres, R. Kracke, M. McCleary, H. Stange, A. Milner, J. Stuart, R. Sayer, J. Evans, J. Kommers, H. S. Lepez, D. Castillo, R. Salvo, J. R. Vidal, S. Takbou, H. Denzau, B. Brinkmann, F. Rossetti, H. Hori, H. Maeno, G. J. Garradd, E. C. Beshore, C. M. Casey, E. J. Christensen, A. D. Grauer, R. E. Hill, S. M. Larson, R. H. McNaught, M. Suzuki, E. Benoy, C. Figura, C. Bell, C. Jacques, E. Pimentel, P. Birtwhistle, T. Climent G., and B. G. Marsden. Observations of Comets. *Minor Planet Electronic Circulars*, pages 64–+, August 2005.

L. Tesi, M. Tombelli, G. Fagioli, M. Mazzucato, G. Forti, S. Gajdos, P. Zigo, J. Toth, C. Cremaschini, S. Foglia, W. Marinello, M. Micheli, G. Pizzetti, A. Soffiantini, R. Haver, R. Gorelli, E. Prosperi, R. Naves, M. Campas, W. Hasubick, E. Reina, K. Kadota, T. Seki, R. H. McNaught, D. Herald, S. G. McAndrew, R. Casas, R. Bambery, M. Hicks, K. Lawrence, E. Helin, R. Thicksten, J. Young, C. Plummer, D. Mayes, R. A. Tucker, D. J. Tholen, F. Bernardi, R. Hill, E. C. Beshore, C. M. Casey, E. J. Christensen, G. J. Garradd, A. D. Grauer, S. M. Larson, M. Blythe, F. Shelly, M. Bezpalko, R. Huber, L. Manguso, D. Torres, R. Kracke, M. McCleary, H. Stange, A. Milner, J. Stuart, R. Sayer, J. Evans, J. Kommers, R. Elliott, J. Maffei, F. Benitez, R. Salvo, J. Castellano, J. R. Vidal, E. Cortes, S. Takbou, H. Denzau, Y. Sugiyama, M. Suzuki, E. Benoy, C. Figura, C. Jacques, E. Pimentel, S. Pastor, J. A. Reyes, F. Montalban, T. Climent G., and B. G. Marsden. Observations of Comets. *Minor Planet Electronic Circulars*, pages 17–+, August 2005.

C. Figura and E. Benoy. Comet Observations [H42 Wartburg College Observatory, Waverly]. *Minor Planet Circulars*, 5452:13–+, July 2005.

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