

# Chadwick H. Young

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## Education

2002-2005	University of Texas at Austin	PhD, Astronomy
2000-2002	University of Texas at Austin	M.A., Astronomy
1997-2000	Mississippi State University	B.S., Physics; Minors in Math and English

## Professional History

May, 2011-present, Nicholls State University, Associate Professor of Physics

August, 2005-May, 2011, Nicholls State University, Assistant Professor of Physics

July, 2004, *Focus on Science*, Freelance writer

Write science articles for this magazine published by the University of Texas College of Natural Sciences

June, 2000-August, 2005, UT Star Formation Group, Graduate Research Assistantship  
Studying low-mass protostars; (sub)millimeter and infrared observations; modeling

January, 2003-January, 2004, McDonald Observatory, Graduate Research Assistantship  
Developing a plan of public outreach for McDonald Observatory through work on the website "What Are Astronomers Doing?" One of two writers for this project.

August 2001-May 2002, UT Astronomy Department, Undergraduate Mentor  
Mentored and advised undergraduate astronomy students in both research projects and general student life.

January 2001-May 2002, UT Astronomy Department, Laboratory Instructor  
Instructor for a discovery class in astronomy. Duties included grading, coordinating lab segments, and lecturing.

August, 1997- May, 2000, Mississippi State University, Laboratory Instructor  
Led a discovery class in physics. Duties included grading, coordinating lab segments, and lecturing. Also, in this period, taught labs for the calculus-based physics course.

August, 1996-May, 1997, Mississippi School for Math and Science, Resident Advisor  
Advised and supervised gifted high school students in dormitory life.

## Sponsored Projects

Young, C.H., Lo, G.V., Melancon, E., et al. "Enhancing Physical & Biological Science Computing Facilities at Nicholls State University," 2010-2011, Board of Regents Traditional Enhancement Program, \$48,996

Young, C.H. & Bourke, T.L. (Harvard Center for Astrophysics), "Measuring the Distance to Low-Mass Star-forming Cores," 2010-2011, Louisiana Space Consortium, NASA, Unsolicited Research Proposal, \$13866

Young, C.H., Guillot, J. (Central Lafourche High School), & Lo, G., "Einstein in Hollywood: Capturing the Scientific Minds of Young Movie Buffs," 2008-2011, National Science Foundation Course, Curriculum and Laboratory Improvement (NSF CCLI), \$39,111

Young, C. H., Lo, G., Moloney, M., Young, K, Lamberty, C., & da Silva, G., "Digital Cameras in the Physical Science Classroom and Laboratory," 2008, Nicholls State University Instructional Technology Support, \$1100

- Doucet, J., Lamberty, C., & Young, C.H., “Enhancing the Honors Experience for Sciences Students at Nicholls State University,” 2008-2009, Board of Regents Undergraduate Enhancement Program, \$45,850
- Lo, G., Bhattacharyya, S., Dupre, A., Lamberty, C., & Young, C.H., “Enhancing Physical Science Instruction in Grades 9-12,” 2008-2010, Louisiana Systemic Initiatives Program (LaSIP), \$99,833
- Young, C.H., Young, K.E. (Nicholls State University), Bourke, T.L. (Harvard University), & Popa, V. (Nicholls State University), “Determining Distances to Star-Forming Cores,” 2007-2008, Nicholls State University Research Council, \$1745
- Young, C. H., Young, K.E. (Nicholls State University) , & Evans, N.J., II (UT Austin), “Probing the Physical Conditions of Low-Mass Star Formation,” 2006, Louisiana Space Consortium Research Enhancement Award (LaSpace REA), \$11,634

## Refereed Publications

- Young, C. H., Bourke, T.L., et al., “Measuring the Distances to Low-mass Star-forming Cores,” in prep.
- Dunham, M.M., Evans, N.J., II, Terebey, S., Dullemond, C.P., & Young, C.H., Evolutionary Signatures in the Formation of Low-Mass Protostars. II. Toward Reconciling Models and Observations,” 2010, ApJ, 710, 470
- Young, C. H., Bourke, T.L., Dunham, M.M., Evans, N.J., Jorgensen, J.K., Shirley, Y.L., Young, K.E., DeVries, C., Claussen, M.J., & Popa, V., “The Spitzer c2d Survey of Nearby Dense Cores: Lynds Dark Nebula 1221,” 2009, ApJ, 702, 340
- Young & Guillot, “Einstein in Hollywood: Capturing the Scientific Minds of Young Movie Buffs,” March 2008, *The Physics Teacher*
- Shirley, Y.L., Claussen, M.J., Bourke, T.L., Young, C.H., & Blake, G.A., “The Detection and Characterization of cm Radio Continuum Emission from the Low-mass Protostar L1014-IRS,” 2007, ApJ, 667, 329
- Wu, J., Dunham, M. M., Evans, N. J., II, Bourke, T.L., Young, C. H., “SHARC-II Mapping of Spitzer c2d Small Clouds and Cores,” 2007, AJ, 133, 1560
- Brooke, T.Y., et al., “Spitzer IRAC and MIPS Observations of the Dark Cloud Core B59,” 2007, ApJ, 655, 364
- Young, C.H., Bourke, T.L., Young, K.E., Evans, N.J., Jorgensen, J.K., Shirley, Y.L., van Dishoeck, E.F., & Hogerheijde, M., “Submillimeter Common-User Bolometer Array Mapping of Spitzer c2d Small Clouds and Cores,” 2006, AJ, 132, 1998
- Dunham, M., Evans, N.J., Bourke, T.L., Dullemond, C.P., Young, C.H., Brooke, T.Y., Chapman, N., Myers, P.C., Porras, A., Spiesman, W., Teuben, P.J., & Wahhaj, Z., “The Spitzer c2d Survey of Nearby Dense Cores I: First Direct Detection of the Embedded Source in IRAM 04191+1522,” 2006, ApJ, 651, 945
- Bourke, T. L., Myers, P. C., Evans, N. J., II, Dunham, M. M.; Kauffmann, J.; Shirley, Y. L.; Crapsi, A.; Young, C. H.; Huard, T. L.; Brooke, T. Y., et al., “The Spitzer c2d Survey of Nearby Dense Cores. II. Discovery of a Low-Luminosity Object in the “Evolved Starless Core” L1521F,” 2006, ApJ, 649, 37
- Bourke, T.L., et al., “Discovery of a Low Mass Bipolar Molecular Outflow from the L1014-IRS with the Submillimeter Array,” 2005, ApJL, 622, 129
- Crapsi, A., et al., “Dynamical and Chemical Properties of the 'Former Starless' Core L1014,” 2005, A&A, 439,

Young, C.H. & Evans, N.J. II, "Evolutionary Signatures of Low-Mass Protostars" 2005, ApJ, 627

Young C.H., et al., "A Starless Core that Isn't: Detection of a Source in the L1014 Dense Core with the Spitzer Space Telescope," 2004, ApJS, 154, 396

Young, C.H., Shirley, Y.L., Evans, N.J. II, & Rawlings, J.M.C., "Tracing the Mass During Low-Mass Star Formation IV: Observations and Modeling of Class I Cores," 2003, ApJS, 145, 111

Evans, N.J. II, et al. "From Molecular Cores to Planet-Forming Disks: A SIRTf Legacy Program" 2003, PASP, 115, 965

Frail, D., Kulkarni, S., Taylor, G., Shepherd, D., Bloom, J., Young, C., Nicastro, L., & N. Masetti, "The Radio Afterglow from GRB 980519: A Test of the Jet and Circumstellar Models," 1999, ApJ, 534, 559

### **Conference Proceedings & Presentations**

Young, C.H., "Einstein in Hollywood: Capturing the Scientific Minds of Movie Buffs," April 2011, Invited Speaker at Department of Physics & Astronomy, Louisiana State University

Young, C.H., Garber, L., & Bourke, T.L., "Measuring the Distances to Low-Mass Star-Forming Cores," October 2010, 77<sup>th</sup> Annual Meeting the Southeastern Section of the American Physical Society

Young, C.H., "The Physics of Movies," October 2010, 77<sup>th</sup> Annual Meeting the Southeastern Section of the American Physical Society

Young, C.H., "The Lives of Baby Stars," October 2010, Invited Speaker at Department of Physics & Astronomy, Mississippi State University

Young, C.H., "The Lives of Baby Stars," September 2010, Speaking of Research Series, Nicholls State University

Dunham, Michael M., Evans, N. J., II, Terebey, S., Dullemond, C. P., Young, C. H., "Evolutionary Models of the Formation of Protostars out of Low-Mass, Dense Cores: Towards Reconciling Models and Observations," January 2010, annual meeting of the American Astronomical Society

Young, C.H., Guillot, J, & Richoux, B. "The Physics of Movies: Utilizing Popular Movies in you Classroom," December 2009, Annual Conference of the Louisiana Computer Using Educators (LaCUE)

Young, C.H., Guillot, J., & Gauthreaux, K., "Einstein in Hollywood: Capturing the Scientific Minds of Young Movie Buffs," March 2009, Annual Meeting of the National Science Teacher's Association

Young, C.H., "Einstein in Hollywood: Capturing the Scientific Minds of Young Movie Buffs," October 2008, Nicholls State University Café Symposium

Young, C.H., "The Physics of Movies," April 2008, Nicholls State University Research Week

Young, C. H., et al., "The Protostars of Lynds' Dark Nebula 1221," 2008, Meeting of the American Astronomical Society

Young, C.H., "Physics Research at Nicholls State University," 2007, Invited speaker at Southeastern Louisiana University

Young, C.H., Young, K.E., Bourke, T.L., Evans, N.J., & Popa, V., "The Protostars of Lynds Dark Nebula 1221," 2007, Meeting of the Louisiana Academy of Sciences

Young, C.H., "Low-mass Star Formation," Invited Speaker at Rainwater Observatory, French Camp, Mississippi, April 2006

Myers, P.C., Bourke, T.L., Huard, T.L., Evans, N.J., Kauffmann, K., Dunham, M.M., Brooke, T.Y., Young, C.H. and the c2d collaboration, "Spitzer Discovery of Very Low Luminosity Objects in Dense Cores," 2006, Meeting of the American Astronomical Society, 207, 6353.

Bourke, T. L., Crapsi, A., Myers, P. C., Evans, N. J., II, Wilner, D. J., Huard, T. L., Jorgensen, J. K., Young, C. H., "Discovery of a Low Mass Bipolar Molecular Outflow from L1014-IRS with the Submillimeter Array," 2005, Meeting of the American Astronomical Society, 207, 7415

Bourke, T., Crapsi, A., Myers, P., Wilner, D., Evans, N., Huard, T., Jorgensen, J., & Young, C., 2005, "L1014-IRS: A proto-brown-dwarf in a starless core?" Star Formation in the Era of Three Great Observatories

Shirley, Y.L, Young, C.H., et al., 2004, "Observations of the Spitzer-detected Source in the Previously Classified Starless Core L1014," The Spitzer Space Telescope, New Views of the Cosmos, hosted by the Spitzer Science Center

Hemenway, M.K., Jaffe, D.T., Alvarez, M., Young, C.H., & Tykoski, M.J., 2004, "Discovery Lab at UT Austin," Cosmos in the Classroom, A National Symposium on Teaching Astronomy, hosted by the Astronomical Society of the Pacific

Hemenway, M.K., Preston, S. L., Johnson, R.A., Young, C.H., Connor, P.S., Summers, A.C., & Tykoski, M.J., 2004, "What are Astronomers Doing?" at McDonald Observatory: An Education/Public Outreach Website and Museum Kiosk," 204<sup>th</sup> AAS Meeting, #78.03, BAAS, 204, 7803

Johnson, R.J., et al., 2003, "What Are Astronomers Doing?" Communicating Astronomy to the Public, hosted by the National Radio Astronomical Observatory

Doty, S.D., Palotti, M., Moore, M., Shirley, Y., Young, C., & Evans, N.J. II, 2002, "Inferring Cloud Structure by Modeling Continuum Dust Emission" in Chemistry as a Diagnostic of Star Formation, eds. C.L. Curry & M. Fich, NRC Press

Lee, J. E., Young, C. H., Shirley, Y. L., Mueller, K. E., & Evans, N. J. 2002, "Dust and Molecular Emission from the S235 Star Forming Region" in Hot Star Workshop III: The Earliest Phases of Massive Star Birth, ed. P. A. Crowther, ASP conf. series, astro-ph/0111102.

Lee, J.-E., Young, C. H., Di Francesco, J., Jacobson, H., & Evans, N. J., II, 2002, "The Velocity Structures in Protostellar Cores," 200th AAS Meeting, #71.17, BAAS, 34, 763

Shirley, Y.L., Mueller, K.E., Young, C.H., & Evans, N.J. II, 2002, "Submillimeter Dust Continuum Studies of Low and High Mass Star Formation" in Galactic Star Formation Across the Stellar Mass Spectrum, ASP conf. series, ed. James M. De Buizer, astro-ph/0205519.

Young, C.H. & Guenther, K.G., 2002, "Formation of Substellar Objects: A SIRTf Legacy" in IAU Symposium 211: Brown Dwarfs

Young, C.H., Guenther, K.G., & the SIRTf Cores to Disks Legacy Team, 2002, "Formation of Substellar Objects: A SIRTf Legacy," 200th AAS Meeting, #11.04, BAAS, 34, 658

Young, C. H., Shirley, Y. L., Evans, N. J., II, & Rawlings, J. M. C., 2001, "Tracing the Mass in Low-Mass Star Formation: Preprotostellar to Class I Cores," 199th AAS Meeting, #60.03, BAAS, 33, 1394

Shirley, Y. L., Young, C. H., Evans, N. J., II, & Rawlings, J. M. C., 2001, "Modeling the Submillimeter Dust

Continuum Emission from Nearby Low Mass Star Forming Cores," 199th AAS Meeting, #37.04, BAAS, 33, 1360

Young, C. H., Shirley, Y. L., & Evans, N. J., 2000, "Submillimeter Observations of Protostellar Cores, 67th Meeting of the APS Southeastern Section

Young, C. H., Frail, D. A., & Kulkarni, S. R., 1999, "Long Term Radio Observations of GRB 980329," 195th AAS Meeting, #71.05, BAAS, 31, 1474