

Curriculum Vitae

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Birthdate/place: July 1, 1962/New York, New York

Education:

1984 Sc.B. Massachusetts Institute of Technology, Physics
Thesis: *Grain Alignment in Molecular Clouds*
Advisor: C. Alcock
1986 A.M. Harvard University, Physics
1989 Ph.D. Harvard University, Physics
Thesis: *Interstellar Magnetic Fields: An Observational Perspective*
Advisor: P. Myers

Academic Experience:

2009- Scholar-in-Residence, WGBH Boston (consultant role)
2008-2009 Scholar-in-Residence, WGBH Boston (sabbatical)
2005-2008 Founding Director, Harvard Initiative in Innovative Computing
2002-2010 Principal Investigator, The COMPLETE Survey of Star-Forming Regions
1999- Professor, Harvard University Astronomy Department
1995- Research Associate, Smithsonian Astrophysical Observatory
2001-2002 Visiting Professor, Yale University Astronomy Department (sabbatical)
1996-1999 Associate Professor, Harvard University Astronomy Department
1995-1997 Head Tutor, Harvard University Astronomy Department
1992-1996 Assistant Professor, Harvard University Astronomy Department
1989-1992 Post-doctoral Fellow, University of California, Berkeley
1984-1989 Research Assistant, Harvard-Smithsonian Center for Astrophysics
1983 Summer Fellow, NASA-Goddard Institute for Space Studies

Honors, Awards and Elected Positions:

2009 Fellow, American Association for the Advancement of Science (AAAS)
2009 Collins Lecturer, Massachusetts General Hospital
2008 Inaugural "Scholar-in-Residence" at WGBH, Boston
2008- Microsoft Academic Partner
2008- Apple Science Innovator Award
2008 Chair, Astronomy Section of the AAAS
2006 NCSA Distinguished Lecturer, National Center for Supercomputer Applications
2005 Dean's Distinguished Lecturer, Harvard School of Public Health

2004	Sturm Lecturer, Wesleyan University
1998	Bok Prize, Harvard University
1997	Newton Lacy Pierce Prize, American Astronomical Society
1994-2000	National Science Foundation Young Investigator
1994	Pedagogical Innovation Award, Harvard University
1993-1995	Alfred P. Sloan Fellow
1989-1991	President's Fellowship, University of California, Berkeley
1990	First Prize Paper, NATO ASI on Star Formation
1986-1989	Amelia Earhart Fellowships from Zonta International
1985	Francis Lee Freidman Award in Physics, Harvard University
1983	Sigma Pi Sigma, MIT

Society Memberships:

American Association for the Advancement of Science; American Association of University Professors; American Astronomical Society; International Astronomical Union; Association for Computing Machinery; IEEE; URSI Commission J (Radio Astronomy)

Advisory & Review Committees:

NASA-Infrared Space Observatory Key Projects Review (1992); Scientific Working Group for NRAO Green Bank Telescope (1992-99); Arecibo Users and Scientific Advisory Committee (1993-96); NSF Site Review for Center for Particle Astrophysics (1994); NASA-Astrophysics Data Program Review (1995); Smithsonian Astrophysical Observatory Time Allocation Committee (1995-97); NSF-Caltech Submillimeter Observatory Review (1996); NSF Galactic Astronomy ISM Panel (1996, 2000 (chair)); M4 Satellite Science Advisory Group, Chair (1997, 2000); Harvard University Faculty Council (1997-98); AAS Publications Board (1998-2001); United States Square Kilometer Array Consortium Representative (1999-); National Academy of Science's Committee on Astronomy and Astrophysics (2000-2003); NASA-SIRTF Legacy Review, Panel Chair (2000); AAS Committee on Astronomy and Public Policy (2000-6); NRAO VLA/VLBA Time Allocation Committee (2001-4); AUI NRAO Director Search Committee (2002); Harvard University Provost's Committee on Science (2002-3); Task Force on Science and Technology (Harvard, 2003-4); Center for Astrophysics Director Search Advisory Committee (2003-4); Spitzer Science Center Oversight Committee (2003-6); Harvard Commission of Inquiry (2004-5, 2007-8); Harvard Subcommittee on Quantitative Reasoning (2002-); Goldwater Scholarship Selection Committee (2004-); Harvard FAS Dean Search Advisory Committee (2006-7); AAS Chambliss Award (for Textbook Writing) Committee (2006-7); Yale University Visiting Committee for Astronomy (2008); AAAS Chair (2008); AAAS Board (2009); NRC board on Research Data and Information (2009-); VAO Scientific Advisory Committee (2009-); ALMA North American Science Advisory Committee (2009-)

Bibliography for Alyssa A. Goodman

2010: Print Journals, including recent submissions

- Schnee, S., Enoch, M., Noriega-Crespo, A., Sayers, J., Terebey, S., Caselli, P., Foster, J., Goodman, A., et al. 2010, “The Dust Emissivity Spectral Index in the Starless Core TMC-1C,” *ApJ*, 708, 127-136
- Shetty, R., Collins, D. C., Kauffmann, J., Goodman, A. A., Rosolowsky, E. W. & Norman, M. L. 2010, “The Effect of Projection on Derived Mass-Size and Linewidth-Size Relationships,” *ArXiv e-prints*, 1001, 4549 (Accepted to *ApJ*)
- Pineda, J. E., Goodman, A. A., Arce, H. G., Caselli, P., Foster, J. B., Myers, P. C. & Rosolowsky, E. W. 2010, “Direct Observation of a Sharp Transition to Coherence in Dense Cores,” *ArXiv e-prints*, 1002, 2946 (Accepted to *ApJL*)
- Kauffmann, J., Pillai, T., Shetty, R., Myers, P. C. & Goodman, A. A. 2010, “The Mass-Size Relation from Clouds to Cores. I. A New Probe of Structure in Molecular Clouds,” *ArXiv e-prints*, 1002, 608 (Accepted to *ApJ*)
- Kauffmann, J., Rosolowsky, E., Pineda, J. E., Foster, J. B., Borkin, M. A., Halle, M., Alan, D. & Goodman, A. A. 2010, “The COMPLETE Structure of L1448: Where (and Why) Dense Cores Do Form,” *ApJ*, submitted
- Kauffmann, J., Pillai, T., Shetty, R., Myers, P. C. & Goodman, A. A. 2010, “The Mass-Size Relation from Clouds to Cores. II. Solar Neighborhood Clouds,” *ApJ*, submitted
- Arce, H. G., Borkin, M. A., Goodman, A. A. & Pineda, J. E. 2010, “The COMPLETE Survey of Outflows in Perseus,” *ApJ*, submitted

2010: Electronic Media

- Goodman, A., Wong, C. & Udomprasert, P. 2010, “Galileo’s New Order”, World Wide Telescope Tour Series, ed. C. Wong, published through <http://worldwidetelescope.org>
- Goodman, A. A., & Udomprasert, P. 2010, “The WorldWide Telescope Ambassadors Program” <http://www.cfa.harvard.edu/WWTAmbassadors/>
- Goodman, A. A., Wong, C. & Udomprasert, P. 2010, “Galileo’s New Order”, WorldWide Telescope Tours, published through http://www.youtube.com/watch?v=__DiJkv__TosQ

2009: Print Journals

- Foster, J. B., Rosolowsky, E. W., Kauffmann, J., Pineda, J. E., Borkin, M. A., Caselli, P., Myers, P. C. & Goodman, A. A. 2009, “Dense Cores in Perseus: The Influence of Stellar Content and Cluster Environment,” *ApJ*, 696, 298-319

- Goodman, A. A., Rosolowsky, E. W., Borkin, M. A., Foster, J. B., Halle, M., Kauffmann, J., & Pineda, J. E. 2009, "A role for self-gravity at multiple length scales in the process of star formation," *Nature*, 457, 63-66
- Goodman, A. A., Pineda, J. E., & Schnee, S. L. 2009, "The 'True' Column Density Distribution in Star-Forming Molecular Clouds," *ApJ*, 692, 91-103
- Goodman, A. 2009, "Seeing Science," *ArXiv e-prints*, 0911, 3349
- Li, H.-b., Dowell, C. D., Goodman, A., Hildebrand, R., & Novak, G. 2009, "Anchoring Magnetic Field in Turbulent Molecular Clouds," *ApJ*, 704, 891-897
- Mohanty, S., Burgasser, A., Chabrier, G., Padoan, P., Hennebelle, P., Pascucci, I., Kraus, A., Baraffe, I., ...Goodman, A...et al. 2009, "Bridging the Gap Between Stars and Planets: The Formation and Early Evolution of Brown Dwarfs (Whitepaper)," *astro2010: The Astronomy and Astrophysics Decadal Survey*, 2010, 212
- Pineda, J. E., Rosolowsky, E. W., & Goodman, A. A. 2009, "The Perils of Clumpfind: The Mass Spectrum of Substructures in Molecular Clouds," *ApJ*, 699, L134-L138
- Rosolowsky, E. W., Pineda, J. E., Foster, J. B., Borkin, M. A., Kauffmann, J., Caselli, P., Myers, P. C., & Goodman, A. A. 2009, "Ammonia spectral atlas in Perseus (Rosolowsky+, 2008)," in *VizieR Online Data Catalog*, 50509
- Shetty, R., Kauffmann, J., Schnee, S., Goodman, A. A., & Ercolano, B. 2009, "The Effect of Line-of-Sight Temperature Variation and Noise on Dust Continuum Observations," *ApJ*, 696, 2234-2251
- Shetty, R., Kauffmann, J., Schnee, S., & Goodman, A. A. 2009, "The Effect of Noise on the Dust Temperature-Spectral Index Correlation," *ApJ*, 696, 676-680

2009: Electronic Media

- Goodman, A. 2009, "Demonstration of the (First) 3D PDF Published in the Journal *Nature*", published through <http://www.youtube.com/watch?v=AEuCA22Eq1s>

2008: Print Journals

- Pineda, J. E., Caselli, P., & Goodman, A. A. 2008, "CO Isotopologues in the Perseus Molecular Cloud Complex: the X-factor and Regional Variations," *ApJ*, 679, 481-496
- Schnee, S., Li, J., Goodman, A. A., & Sargent, A. I. 2008, "Dust Emission from the Perseus Molecular Cloud," *ApJ*, 684, 1228-1239
- Rosolowsky, E. W., Pineda, J. E., Kauffmann, J., & Goodman, A. A. 2008, "Structural Analysis of Molecular Clouds: Dendrograms," *ApJ*, 679, 1338-1351
- Rosolowsky, E. W., Goodman, A.A., et al. 2008, "An Ammonia Spectral Atlas of Dense Cores

in Perseus,” *ApJS*, 175, 509-521

Foster, J. B., Román-Zúñiga, C. G., Goodman, A. A., Lada, E. A., & Alves, J. 2008, “Hunting Galaxies to (and for) Extinction,” *ApJ*, 674, 831-845

Goodman, A. 2008, “A Virtual Telescope,” <http://www.microsoft.com/issues/essays/2008/06-24Telescope.msp>, appeared in *several print publications, including Wall Street Journal, Boston Globe, International Herald Tribune, etc.*

Borkin, M., Arce, H., Goodman, A., & Halle, M. 2008, in *Astronomical Data Analysis Software and Systems XVII*, “3D Visualization and Detection of Outflows From Young Stars”, 145

2008: Electronic Media

Goodman, A., Detloff, L., Sharma, S., Watzke, M., & Wong, C. 2008, “Astronomy for Everyone”, World Wide Telescope Tour Series, ed. C. Wong, published through <http://worldwidetelescope.org>

Goodman, A. 2008, “Dust and Us”, World Wide Telescope Tour Series, ed. C. Wong, published through <http://worldwidetelescope.org>

2007: Print Journals

Schnee, S., Caselli, P., Goodman, A., Arce, H. G., Ballesteros-Paredes, J., & Kuchibhotla, K. 2007, “TMC-1C: An Accreting Starless Core,” *ApJ*, 671, 1839-1857

Goodwin, S. P., Kroupa, P., Goodman, A., & Burkert, A. 2007, “The Fragmentation of Cores and the Initial Binary Population”, *Protostars and Planets V*, 133-147.

Schnee, S., Kauffmann, J., Goodman, A., Bertoldi, F. 2007, “The Effect of Noise in Dust Emission Maps on the Derivation of Column Density, Temperature, and Emissivity Spectral Index,” *ApJ*, 657, 838-848

Borkin, M., Goodman, A., Halle, M., & Alan, D. 2007. in *Astronomical Data Analysis Software and Systems XVI*, “Application of Medical Imaging Software to 3D Visualization of Astronomical Data”, 621

2007: Electronic Media

Goodman, A. & Rosolowsky, E. 2007, “Star Formation Taste Tests,” <http://www.cfa.harvard.edu/agoodman/tastetests/>.

2006: Print Journals

Foster, J. B., & Goodman, A. A. 2006, “Cloudshine: New Light on Dark Clouds,” *ApJ*, 636, L105-L108

Pineda, J. E., et al. 2006, “Clumpfinding in the Perseus Molecular Cloud,” *Rev. Mex. Astron.*

Astroph. Conf. Ser., 26, 164

Ridge, N. A., Schnee, S. L., Goodman, A. A., & Foster, J. B. 2006, “The COMPLETE Nature of the Warm Dust Ring in Perseus,” *ApJ*, 643, 932

Ridge, N. A., Goodman, A.A. et al. 2006, “The COMPLETE Survey of Star-Forming Regions: Phase I Data,” *AJ*, 131, 2921-2933

Schnee, S., Bethell, T., Goodman, A. 2006, “Estimating the Column Density in Molecular Clouds with Far-Infrared and Submillimeter Emission Maps,” *ApJ*, 640, L47-L50

2006: Electronic Media

Goodman, A. & the COMPLETE Team, “The COMPLETE Survey of Star-Forming Regions” (Data Site), <http://www.cfa.harvard.edu/COMPLETE/>.

2005

Borkin, M. A., Ridge, N. A., Goodman, A. A., & Halle, M. 2005, “Demonstration of the applicability of 3D Slicer to Astronomical Data Using ^{13}CO and C^{18}O Observations of IC348” (astro-ph/0506604)

Schnee, S. & Goodman, A. 2005, “Density and Temperature Structure of TMC-1C from 450 and 850 Micron Maps,” *ApJ*, 624, 254-266

Schnee, S. L., Ridge, N. A., Goodman, A. A., Li, J. G. 2005, “A COMPLETE Look at the Use of IRAS Emission Maps to Estimate Extinction and Dust Temperature,” *ApJ*, 634, 442-450

2004

Bourke, T. L., & Goodman, A. A. 2004. “Magnetic Fields in Molecular Clouds,” in IAU Symposium, in *Star Formation at High Angular Resolution*, 221, 83

Goodman, A. A. 2004. “The COMPLETE Survey of Star-Forming Regions on its Second Birthday,” in ASP Conf. Ser. 323, in *Star Formation in the Interstellar Medium*, 171

Goodman, A. A., & Arce, H. G. 2004, “PV Ceph: Young Star Caught Speeding?,” *ApJ*, 608, 831-845

2003

Padoan, P., Goodman, A. A., & Juvela, M. 2003, “The Spectral Correlation Function of Molecular Clouds: A Statistical Test for Theoretical Models,” *ApJ*, 588, 881-893

2002

Arce, H. G., & Goodman, A. A. 2002, “The Great PV Cephei Outflow: A Case Study in Outflow-Cloud Interaction,” *ApJ*, 575, 911-927

Arce, H. G., & Goodman, A. A. 2002, “Bow Shocks, Wiggling Jets, and Wide-Angle Winds: A High-Resolution Study of the Entrainment Mechanism of the PV Cephei Molecular (CO) Outflow,” *ApJ*, **575**, 928-949

Ballesteros-Paredes, J., Vázquez-Semadeni, E., & Goodman, A. A. 2002, “Velocity Structure of the Interstellar Medium as Seen by the Spectral Correlation Function,” *ApJ*, **571**, 334-355
2001

Arce, H. G. and Goodman, A.A. 2001, “The Episodic, Precessing Giant Molecular Outflow from IRAS 04239+2436 (HH 300),” *ApJ*, **554**, 132.

Arce, H. G. and Goodman, A.A. 2001, “The Mass-Velocity and Position-Velocity Relations in Episodic Outflows,” *ApJL*, **551**, L171.

Padoan, P., Goodman, A., Draine, B., Juvela, M., Nordlund, A. and Rognvaldsson, O.E. 2001, “Theoretical Models of Polarized Dust Emission from Protostellar Cores,” *ApJ*, **559**, 1005 (astro-ph/0104231).

Padoan, P., Juvela, M., Goodman, A.A. and Nordlund, A. 2001, “The Turbulent Shock Origin of Proto-Stellar Cores,” *ApJ*, **553**, 227.

Padoan, P., Kim, S., Goodman, A. and Staveley-Smith, L. 2001, “A New Method to Measure and Map the Gas Scale Height of Disk Galaxies,” *ApJ*, **555**, L33.

Padoan, P., Nordlund, A., Rognvaldsson, O. E. and Goodman, A. 2001, “Turbulent Fragmentation and the Initial Conditions for Star Formation,” ASP Conf. Ser. 243, 279 (astro-ph 111229)

Padoan, P., Rosolowsky, E.W. and Goodman, A.A. 2001, “The Effects of Noise and Sampling on the Spectral Correlation Function,” *ApJ*, **547**, 862.

2000

Arce, H.G. and Goodman, A.A. 2000, “New Components of YSO Outflows Revealed through High-Resolution,” in *Science with the Atacama Large Millimeter Array (ALMA)*, A. Wooten, ed.

Arce, H.G. and Goodman, A.A. 2000, “On the Fly Mapping of Giant Molecular Outflows,” in *Imaging at Radio through Submillimeter Wavelengths*. ASP Conference Series, ed. J. Mangum.

Goodman, A.A. 2000, “Recycling in the Universe,” *Sky & Telescope*, Vol. **100**, No. 5, cover.

Weintraub, D., Goodman, A.A., and Akeson, R. 2000, “Polarized Light from Star Forming Regions,” in *Protostars and Planets IV*, ed. V. Mannings, A. Boss and S. Russell, (Tucson: University of Arizona Press) p. 247. (Invited Review)

1999

Arce, H.G. and Goodman, A.A. 1999, “Measuring Galactic Extinction: A Test,” *ApJ (Letters)*, **512**, p. 135.

Arce, H.G. and Goodman, A.A. 1999, “An Extinction Study of the Taurus Dark Cloud Complex,” *ApJ*, **517**, p. 264.

Riess, A.G.,...Goodman, A.A. et al. 1999, “*BVRI* Light Curves for 22 Type Ia Supernovae,” *AJ*, **117**, 707.

Rosolowsky, E., Goodman, A.A., Wilner, D.J., and Williams, J.P. 1999, “The Spectral Correlation Function—A New Tool for Analyzing Spectral Line Maps,” *ApJ*, **524**, 887.

1998

Arce, H.G., Goodman, A.A., Bastien, P., Manset, N., and Sumner, M.C. 1998, “The Polarizing Power of the Interstellar Medium in Taurus,” *ApJ (Letters)*, **499**, L93.

Barranco, J.A. and Goodman, A.A. 1998, “Coherence in Dense Cores. I: NH₃ Observations,” *ApJ*, **504**, 207.

Goodman, A.A., Barranco, J.A., Wilner, D.J. and Heyer, M.H. 1998, “Coherence in Dense Cores. II: The Transition to Coherence.,” *ApJ*, **504**, 223

Goodman, A.A., Barranco, J.A., Wilner, D.J. and Heyer, M.H. 1998, “Velocity Coherence in Dense Cores,” *Astrophys. Lett. & Comm.*, **37**, 109.

1997

Goodman, A.A., Barranco, J.A., Wilner, D.J. and Heyer, M.H. 1997, “Velocity Coherence in Dense Cores,” in *CO: 25 Years of Millimeter Spectroscopy*, ed. W. Latter, S.J.E. Radford, P.R. Jewell, J.G. Mangum and J. Bally (Dordrecht: Kluwer), p. 116.

Goodman, A.A., Barranco, J.A., Wilner, D.J. and Heyer, M.H. 1997, “Velocity Coherence in Dense Cores,” in *Star Formation Near and Far*, ed. S. Holt and L. Mundy (New York: AIP), p. 105.

Lazarian, A., Goodman, A.A. and Myers, P.C. 1997, “On the Efficiency of Grain Alignment in Dark Clouds,” *ApJ*, **490**, 273.

Pound, M. and Goodman, A.A. 1997, “The Ursa Major Molecular Clouds,” in *CO: 25 Years of Millimeter Spectroscopy*, ed. W. Latter, S.J.E. Radford, P.R. Jewell, J.G. Mangum and J. Bally (Dordrecht: Kluwer), p. 33.

Pound, M. and Goodman, A.A. 1997, “Kinematics of the Ursa Major Molecular Clouds,” *ApJ*, **482**, 334.

1996

Goodman, A.A. 1996, “The Interpretation of Polarization Position Angle Measurements,” in *Polarimetry of the Interstellar Medium*, ASP Conference Series, ed. W. Roberge and D. Whittet (San Francisco: ASP), p. 325. (Invited Review)

Troland, T.H., Crutcher, R.M., Goodman, A.A., Heiles, C., Kazès, I. and Myers, P.C. 1996, “The Magnetic Field in the Ophiuchus and Taurus Molecular Clouds,” *Ap. J.*, **471**, 302.

1995

- Goodman, A.A. 1995, "The Future of Magnetic Field Mapping in the Interstellar Medium," in *Airborne Astronomy Symposium on the Galactic Ecosystem: From Gas to Stars to Dust*, ed. M. Haas, J. Davidson and E. Erickson (San Francisco: ASP), **73**, p. 45.
- Goodman, A.A. 1995, "Mapping Magnetic Fields in the ISM: Infrared and Sub-mm Polarimetry," in *The Physics and Chemistry of Interstellar Molecular Clouds*, ed. G. Winnewisser (Dordrecht: Kluwer).
- Goodman, A.A., Jones, T.J., Lada, E.A. and Myers, P.C. 1995, "Does Near-Infrared Polarimetry Reveal the Magnetic Field in Cold Dark Clouds?," *ApJ*, **448**, 748.
- Goodman, A.A. and Whittet, D.C.B. 1995, "A Point in Favor of the Superparamagnetic Grain Hypothesis," *ApJ (Letters)*, **455**, L181.
- Myers, P.C., Goodman, A.A., Güsten, R. and Heiles, C. 1995, "Observations of Magnetic Fields in Diffuse Clouds," *ApJ*, **442**, 177.

1994

- Benson, P.J., Caselli, P., Myers, P.C. and Goodman, A.A. 1994, " N_2H^+ and C_3H_2 in Dense Cores," in *Clouds, Cores, and Low Mass Stars*, ed. D. Clemens and R. Barvainis (San Francisco: ASP), p. 67.
- Goodman, A.A. and Barranco, J.A. 1994, "Velocity Structure in Dense Cores," in *Clouds, Cores, and Low Mass Stars*, ed. D. Clemens and R. Barvainis (San Francisco: ASP), p. 57.
- Goodman, A.A. and Heiles, C. 1994, "The Magnetic Field in the Ophiuchus Dark Cloud Complex," *ApJ*, **424**, 208.
- Goodman, A.A., Myers, P.C., Güsten, R. and Heiles, C. 1994, "The Magnetic Field in Ursa Major," in *The First Symposium on the Infrared Cirrus and Diffuse Interstellar Clouds*, ed. R. Cutri and W. Latter, ASP Conference Series, **58**, 425.
- Ladd, E.F., Myers, P.C., and Goodman, A.A. 1994, " NH_3 Emission in the Perseus Molecular Cloud Complex," *Ap. J.*, **433**, 117.
- Ladd, E.F., Myers, P.C. and Goodman, A.A. 1994, "The Star Forming Character of Nearby Molecular Clouds: Ammonia Observations of the Perseus Molecular Cloud Complex," in *Clouds, Cores, and Low Mass Stars*, ed. D. Clemens and R. Barvainis (San Francisco: ASP), p. 19.

1993

- Crutcher, R.M., Troland, T.H., Goodman, A.A., Kazès, I., Heiles, C. and Myers, P.C. 1993, "OH Zeeman Observations of Dark Clouds," *ApJ*, **407**, 175.
- Goodman, A.A., Benson, P.J., Fuller, G.A. and Myers, P.C. 1993, "Dense Cores in Dark Clouds VIII.: Velocity Gradients," *Ap. J.*, **406**, 528.
- Heiles, C., Goodman, A.A., McKee, C.F. and Zweibel, E.G. 1993, "Magnetic Fields in Star-

Forming Regions: Observations,” in *Protostars and Planets III*, ed. E.H. Levy and J.I. Lunine (Tucson: University of Arizona Press), p. 279. (Invited Review)

McKee, C.F., Zweibel, E.G., Goodman, A.A. and Heiles, C. 1993, “Magnetic Fields in Star-Forming Regions: Theory,” in *Protostars and Planets III*, ed. E.H. Levy and J.I. Lunine (Tucson: University of Arizona Press), p. 327. (Invited Review)

1992

Goodman, A.A., Jones, T.J., Lada, E.A., and Myers, P.C., “The Structure of Magnetic Fields in Dark Clouds: Infrared Polarimetry in B216-217,” *Ap. J.*, **399**, 108.

1991

Goodman, A.A. 1991, “Magnetic Fields: A Photo Essay,” in *Atoms, Ions, and Molecules: New Results in Spectral Line Astrophysics*, ed. A. Haschick and P.T.P. Ho, (San Francisco: A.S.P. Conference Series), p. 333. (Invited Review)

Goodman, A.A., Myers, P.C., and Bastien, P. 1991, “Polarization of Background Starlight and the Structure of the Interstellar Magnetic Field,” *Fragmentation of Molecular Clouds and Star Formation*, ed. E. Falgarone (Dordrecht: Kluwer), p. 417.

Heiles, C., Goodman, A.A., McKee, C.F., and Zweibel, E.G. 1991, “Magnetic Fields in Dense Regions,” in *Fragmentation of Molecular Clouds and Star Formation*, ed. E. Falgarone (Dordrecht: Kluwer), p. 43. (Invited Review)

Ladd, E.F., Fuller, G.A., Myers, P.C., Stacy, J.G., Benson, P.J. and Goodman, A.A. 1991, “Observations of Dense Gas in Regions Forming Intermediate Mass Stars,” in *Atoms, Ions, and Molecules: New Results in Spectral Line Astrophysics*, ed. A. Haschick and P.T.P. Ho (San Francisco: A.S.P. Conference Series), p. 297.

Myers, P.C., Fuller, G.A., Goodman, A.A., and Benson, P.J. 1991, “Dense Cores in Dark Clouds VI.: Shapes,” *Ap. J.*, **376**, 561.

Myers, P.C. and Goodman, A.A. 1991, “On the Dispersion in Direction of Interstellar Polarization,” *Ap. J.*, **373**, 509.

1990

Goodman, A.A., Bastien, P., Myers, P.C., and Ménard, F. 1990, “Optical Polarization Maps of Star Forming Regions in Perseus, Taurus, and Ophiuchus,” *Ap. J.*, **359**, 363.

Goodman, A.A., Myers, P.C., Bastien, P., Crutcher, R.M., Heiles, C., Kazès, I., and Troland, T.H. 1990, “The Magnetic Field in the Perseus Molecular Cloud Complex,” in *Galactic and Extragalactic Magnetic Fields*, ed. R. Beck, P.P. Kronberg, and R. Wielebinski (Dordrecht: Kluwer), p. 319.

Myers, P.C. and Goodman, A.A. 1990, “Observations and Models of Magnetic Molecular Clouds,” in *Galactic and Extragalactic Magnetic Fields*, ed. R. Beck, P.P. Kronberg, and R. Wielebinski (Dordrecht: Kluwer), p. 309.

1989

- Goodman, A.A., Crutcher, R.M., Heiles, C., Myers, P.C., and Troland, T.H. 1989, "Measurement of Magnetic Field Strength in the Dark Cloud Barnard 1," *ApJ (Letters)*, **338**, L61.
- Goodman, A.A., Crutcher, R.M., Heiles, C., Myers, P.C., and Troland, T.H. 1989, "Measurement of the Magnetic Field in the Molecular Cloud B1," in *The Physics and Chemistry of Interstellar Clouds*, ed. G. Winnewisser (Berlin: Springer-Verlag), p. 182.

1988

- Goodman, A.A. and Myers, P.C. 1988, "Magnetic and Virial Equilibrium in Molecular Clouds," in *Molecular Clouds in the Milky Way and External Galaxies*, ed. R.L. Dickman, R.L. Snell, and J.S. Young (Berlin: Springer-Verlag), p. 128.
- Myers, P.C. and Goodman, A.A. 1988, "Evidence for Magnetic and Virial Equilibrium in Molecular Clouds," *ApJ (Letters)*, **326**, L27.
- Myers, P.C. and Goodman, A.A. 1988, "Magnetic Molecular Clouds: Indirect Evidence for Magnetic Support and Ambipolar Diffusion," *ApJ*, **329**, 392.

1987

- Goodman, A.A. and Myers, P.C. 1987, "Magnetic Fields in Molecular Clouds: How Supportive are They Under Pressure?," in *Interstellar Matter*, ed. J.M. Moran and P.T.P. Ho (New York: Gordon and Breach), p. 169.
- Stacy, J.G., Benson, P.J., Myers, P.C. and Goodman, A.A. 1987, "Dense Cores Associated with Herbig Ae/Be Stars," in *Interstellar Matter*, ed. J.M. Moran and P.T.P. Ho (New York: Gordon and Breach), p. 179.

1986

- Goodman, A.A. 1986, "Magnetic Fields in Molecular Cloud Cores: Limits on Field Strengths and Linewidths," in *Summer School on Interstellar Processes*, ed. D.J. Hollenbach and H.A. Thronson, NASA Technical Memorandum 88342, p. 169.