

CURRICULUM VITAE

- NAME:** Robert David Mathieu
- ADDRESS:** Department of Astronomy
University of Wisconsin - Madison
Madison, WI 53706
(608) 890-3767
mathieu@astro.wisc.edu
- RESEARCH INTERESTS:** Stellar evolution and dynamics; STEM learning in higher education
- Special interests: Alternative stellar evolution pathways
Binary star populations
Structure, kinematics and dynamics
of star clusters and star-forming regions
Future faculty development in STEM
- EDUCATION:** University of California, Berkeley
Degree: Ph.D. in Astronomy, 1983
Thesis Title: The Structure, Internal Kinematics and
Dynamics of Open Star Clusters
Thesis Advisor: Prof. Ivan R. King
- Princeton University
Degree: A.B. *summa cum laude* in Astronomy, 1978
Thesis Title: The Effects of Binaries on the Evolution of
Isolated Spherical Star Systems
Thesis Advisor: Prof. Lyman Spitzer, Jr.
- PROFESSIONAL POSITIONS:**
- 2018- Albert E. Whitford Professor of Astronomy
 - 2015- Affiliate Professor, Education Leadership and Policy Analysis
 - 2013-2019 Associate Dean for Research, School of Education
 - 2013-2019 Director, Wisconsin Center for Education Research
 - 2013- Vilas Distinguished Achievement Professor of Astronomy
 - 2008-12 Chair, Department of Astronomy
 - 2002- Director, Center for the Integration of Research, Teaching, and Learning
 - 1999-04 President, WIYN Observatory Board of Directors
 - 1998-01 Associate Director, National Institute for Science Education
 - 1998-01 Director, College Level - 1 Institute
 - 1996- Professor, University of Wisconsin - Madison
 - 1992-93 Visiting Associate Astronomer, Lick Observatory, Univ. of California, Santa Cruz
 - 1991-96 Associate Professor, University of Wisconsin - Madison
 - 1987-91 Assistant Professor, University of Wisconsin - Madison
 - 1985-87 Astronomer, Smithsonian Astrophysical Observatory
 - 1983-85 Harvard-Smithsonian Center for Astrophysics Post-Doctoral Fellow

PROFESSIONAL SERVICE (INTER/NATIONAL):

Astronomy - Agencies and Associations

American Astronomical Society

- 2011 Astrophysical Journal Letters, Editor Search Committee
- 2010-13 Councilor (member of Executive Committee)
- 2006-09 American Astronomical Society Education Board
- 2003-06 American Astronomical Society Education Prize Committee (Chair, 2006)
- 2001-13 Editorial Board, Astronomy Education Review

Association of Universities for Research in Astronomy

- 2019- Member Representative

European Southern Observatory

- 2011-12 Scientific Organizing Committee, ESO Conference, Ecology of Blue Stragglers

International Astronomical Union

- 2015- Organizing Committee, IAU Commission G1, Binary and Multiple Star Systems
- 2006-12 Organizing Committee, IAU Commission 30
- 2003-04 Scientific Organizing Committee, Third Granada Workshop on Stellar Structure
- 1999-00 Scientific Organizing Committee, IAU Symposium 200 (Co-Chair)
- 1999-05 Organizing Committee, IAU Commission 26

National Academy of Science/ National Research Council

- 2008-09 Astro2010: Education and Outreach Study Group
- 1999-00 UV/OIR Panel, Decadal Survey Committee
- 1996-97 Task Group on Space Science and Astrophysics

NASA

- 2011 Hubble Space Telescope Time Allocation Committee
- 2003 Hubble Fellows Selection Committee
- 2000 Hubble Space Telescope Time Allocation Committee
- 1992 Hubble Space Telescope Time Allocation Committee

National Science Foundation

- 2019 Division of Astronomical Sciences Committee of Visitors
- 2018 CAREER Program Panel
- 2011 Alliances for Graduate Education and the Professoriate (AGEP) Panel
- 2006 Galactic Astronomy Panel, Division of Astronomical Sciences (Chair)
- 2004 CAREER Program Panel (Chair)
- 2002 Committee of Visitors, Astronomy Division
- 2003 Instrumentation & Laboratory Improvement Panel, Division of Undergraduate Ed.
- 2001 CAREER Program Panel (Chair)
- 1998 Physics and Astronomy Panel, NSF Graduate Fellowship Program
- 1997 Galactic Astronomy Panel, Division of Astronomical Sciences
- 1996 CAREER Program Panel
- 1991-92 Physics and Astronomy Panel, NSF Graduate Fellowship Program

Miscellaneous

- 2012-13 Scientific Organizing Committee, Exoplanets in the Post-Kepler Era

Astronomy - Observatories

Keck Observatory

- 2007 Time Allocation Committee (Chair)
- National Optical Astronomy Observatories
- 1998 Workshop on the O/IR Ground-based System
- 1995-97 Kitt Peak National Observatory Users Committee (Chair, 1997)
- 1987-90 Kitt Peak National Observatory Time Allocation Committee
- WIYN Observatory, Inc.
- 2011-12 Scientific Steering Committee (Chair)
- 2008- Board of Directors
- 1995-04 Board of Directors (President, 1999 - 2004)
- 1995-99 Scientific Advisory Committee (Chair, 1997-1999)

Astronomy – Reviewer

Astronomical Journal, Astronomy and Astrophysics, Astrophysical Journal and Letters, Monthly Notices of the Royal Astronomical Society, Nature, Science

Education and Outreach

- 2018- STEM Education Advisory Panel (White House Office of Science and Technology Policy)
- 2018- Advisory Board, AAU PhD Education Initiative
- 2016- Board of Directors, Wisconsin Academy of Sciences, Arts and Letters
- 2016- Advisory Board, Center for Advancing STEM Leadership
- 2015 Review Committee, Research Centers, College of Education and Human Development, University of Minnesota
- 2014-16 Advisory Board, Madison Schools of Hope
- 2014-19 Board of Directors *ex officio*, Wisconsin Center for Education Products and Services
- 2012-19 Advisory Board, DREAM STEM-Driving Research, Entrepreneurship, and Academics through Mastering STEM
- 2011-13 Advisory Board, Fusion Science Theater
- 2009-16 Advisory Board, Longitudinal Study of Future STEM Faculty
- 2009-10 Strategic Planning, Team 1a, Purdue University – External Consultant
- 2007-08 Sigma Xi Distinguished Lecturer
- 2007–12 International Advisory Board, Irish National Academy for the Integration of Research, Teaching and Learning in Higher Education
- 2006-10 Advisory Board, “Aligning Engineering Practice with Engineering Education: How People Learn Engineering”
- 2006-09 Carnegie Academy for the Scholarship of Teaching and Learning Institutional Leadership Program (Team Leader)
- 2003-05 Howard University Science, Engineering and Mathematics Advisory Committee
- 1999 Project Kaleidoscope Roundtable
- 1998 Advisory Committee, Promotion of Institutional Change, American Association for Higher Education
- 1991-92 Annual Meeting, Astronomical Society of the Pacific (Chair)

PROFESSIONAL SERVICE (UNIVERSITY OF WISCONSIN - MADISON):

University

2020	Review Committee, Dean, Graduate School
2015-	Executive Council, Collaborative for Advancing Teaching and Learning
2015	Search and Screen Committee, Dean, School of Education
2014-19	Research Policy Advisory Committee
2014-17	WisCEL Advisory Group
2013-17	Quality and Compliance Oversight and Advisory Committee
2013-19	Associate Deans for Research Committee
2008	Chancellor Search-and-Screen Committee
2007-09	Reaccreditation Project 2009
	“Rethinking the Public University” Team (Co-Chair)
	Steering Committee
2006-08	Faculty Representative, University of Wisconsin System
2005-08	Board of Directors, PROFS, Inc. (Chair, 2006 - 08)
2005-08	University Committee (Chair, 2006 - 08)
2005-06	Ad Hoc Committee on Tuition Remission
2005-06	Committee on Committees
2004-05	Graduate School Academic Planning Council
2003-	Delta Program in Research, Teaching and Learning (Co-Faculty Director)
2002-05	Physical Sciences Divisional Committee
2001-05	Graduate Faculty Executive Committee
2000-02	Graduate School Research Committee
1997-98	“New Directions: The Reaccreditation Project”; Physical Sciences subcommittee
1992-97	Letters & Science Appeals Committee
1991-92	Undergraduate Education Committee

Department of Astronomy

2008-12	Chair
1996-97	Associate Chair
1987-	Numerous committees

PROFESSIONAL SOCIETIES:

American Association for the Advancement of Science
American Astronomical Society
American Educational Research Association
American Physical Society
Astronomical Society of the Pacific
International Astronomical Union
Sigma Xi

RESEARCH HONORS:

2020	Fulbright U.S. Scholar
2019	Fellow of the American Physical Society
2018	WARF Named Professorship – University of Wisconsin - Madison
2016	Fellow, Wisconsin Academy of Sciences, Arts and Letters
2013	Vilas Distinguished Achievement Professorship – University of Wisconsin - Madison
2011	Fellow, American Association for the Advancement of Science
2009	Kellet Mid-Career Award – University of Wisconsin - Madison
2004	Vilas Associate – University of Wisconsin - Madison
1992	Guggenheim Fellow
1989	Presidential Young Investigator Award, National Science Foundation
1983	Elizabeth Uhl Award (excellence in graduate research)
1978	University of California Regents Fellowship
1978	Phi Beta Kappa
1978	Sigma Xi Award (excellence in undergraduate research)
1977	Summer Research Fellowship, Kitt Peak National Observatory
1974	National Merit Scholar
1974	Presidential Australian Science Scholar

EDUCATION HONORS:

2021	Hilldale Award (career award in research, teaching and service)
2007	Distinguished Lecturer, University of Queensland, Australia
2004	Forman Lecturer, Vanderbilt University
1995	University of Wisconsin-Madison Teaching Academy
1991	Distinguished Teaching Award - University of Wisconsin-Madison
1979	Award for Teaching Excellence - University of California, Berkeley

ASTRONOMY RESEARCH FUNDING:

2018-	NASA “The Old Open Cluster M67 Revisited - A Comprehensive Stellar Astrophysical Study with Kepler” (\$150,000)
2017-	NSF “Alternative Pathways of Stellar Evolution in Open Clusters” (\$597,149)
2015-16	NASA “A Comprehensive Stellar Astrophysical Study of the Old Open Cluster M67 with Kepler” (\$100,000)
2014-16	NASA Hubble Space Telescope (\$113,647)
2012-14	NASA Hubble Space Telescope (\$237,792)
2009-14	NSF “Open Clusters at the Interface of Stellar Evolution and Stellar Dynamics” (\$678,000)
2004-09	NSF “Deep Astrometric and Radial Velocity Studies of Old Open Clusters” (\$336,000)
2001-04	NSF “Putting Pre-Main-Sequence Evolutionary Theory to the Test: Interiors and Angular Momentum” (\$270,000)
1999-01	NASA ADP, “The History and IMF of the λ Orionis Star-Forming Region” (\$56,000)
1998-03	NSF “High Precision Radial Velocity Surveys of Open Clusters” (\$243,900)
1998-00	NASA Hubble Space Telescope (\$18,800)

1995-00 NASA Hubble Space Telescope (\$170,800)
 1995-99 NSF “Surveys for PMS Short-Period Binary Stars and Associated Disks” (\$234,000)
 1997-98 NASA Infrared Space Observatory (\$32,300)
 1995-97 NASA ROSAT, “Post T-Tauri Stars in the TW Hydra Association” (\$16,100)
 1990-95 NSF Presidential Young Investigator Award (\$275,000)
 1989-91 NSF “High Precision Radial-Velocity Study of Young Stars” (\$97,800)
 1987- Wisconsin Alumni Research Foundation (multiple grants, each ≈ \$30,000)

EDUCATION FUNDING:

2018-19 NSF “INCLUDES Alliance: Aspire: The National Alliance for Inclusive and Diverse STEM Faculty” (\$10,000,000; co-direct with Association for Public and Land-Grant Universities)
 2017- NSF “Preparing Future Faculty to Improve STEM Education: Broadening the National Impact of the CIRTl Network” (\$2,300,000)
 2016-18 NSF “CIRTl INCLUDES – Toward an Alliance to Prepare a National Faculty for Broadening Success of Underrepresented 2-Year and 4-Year STEM Students” (\$233,000)
 2013-17 NSF “The CIRTl Network: 25 Research Universities Preparing a National Faculty to Advance STEM Undergraduate Learning” (\$5,300,000)
 2013-17 NSF “MOOC-Supported Learning Communities for Future STEM Faculty: Multiple Paths to Advance Evidence-based Teaching” (\$750,000, co-PI)
 2007-12 NSF “The CIRTl Network: Shaping, Connecting and Supporting the Future National STEM Faculty “ (\$5,600,000)
 2007-10 NSF “Improving Undergraduate Experiences in STEM through Mentor Training” (\$375,000, co-PI)
 2006-11 NSF “Building Capacity for Course, Program, and Department Evaluation: Improving and Expanding the *Student Assessment of Learning Gains Site*” (\$559,000)
 2006-07 NSF “CIRTl Diversity Resources – Enhancement and Dissemination” (\$250,000)
 2003-07 NSF “Center for the Integration of Research, Teaching, and Learning” (\$10,000,000)
 2000-02 NSF “Case Studies for the *Learning through Technology (LT²)* Web Site” (\$162,000)
 1999-03 NSF “Enhancement of the Field-Tested Learning Assessment Guide Web Site” (\$539,000, co-PI)
 1999-01 NSF “Classroom Assessment Techniques in College Mathematics for the Field-Tested Learning Assessment Guide” (\$26,700)
 1999-00 NSF National Institute for Science Education (\$2,242,900, co-PI)
 1995-99 NSF Educational Supplement (\$66,700)
 1995 L&S Program to Promote Excellence in Undergraduate Education (\$30,000)

ADVISEES:

Research Experiences
for Undergraduates:

K. Soto (2002, UC Berkeley), T. LeBlanc (2003, Universidad Metropolitana), L. Zambrano (2003, Universidad Metropolitana), S. Yelda (2005, Michigan), M. Morscher (2006, UW-Milwaukee), N. Gosnell (2007, Colorado College), D. Nielson (2007, Colby College), J. Adkins (2008, Eastern Kentucky Univ.), M. Bailey (2008, Berea College), A. Mahmoud (2009, U. Arkansas), E. Jones (2010, Louisiana State Univ.), J. Beker (2011, Carleton College), S. Kessler (2014, Rowan Univ.), F. Klein (2014, UW)

Undergraduate Theses: M. Chun (1989), G. Knopp (1991), M. Turnbull (1998), N. Stroud (2002), S. Kaeppler (2006), M. DiPompeo (2007), T. Finzell (2011), J. Penn (2012), N. Eggen (2017), R. Drake (2020), D. Szmulewski (2021)

Masters Degrees: W. Caplan (1990), K. Rhode (1997, Wesleyan, with W. Herbst), E. Braden (2008), M. Pollack (2017), E. Carlson (2018)

Ph.D. Degrees - Astronomy: C.-W. Lee (1992), B. Casey (1996), E. Jensen (1996), C. Dolan (2000), K. Stassun (2000), S. Meibom (2005), A. Geller (2010), N. Gosnell (2014), K. Milliman (2016), E. Leiner (2018), B. Tofflemire (2018), A. Nine (2022, anticipated)

Ph.D. Degrees - Education: J. Savoy (2021, anticipated)

Post-Doctoral Researchers - Astronomy: L.P. Vaz (1994-95), T. von Hippel (1995-97; McKinney Fellow), S. Barnes (1999-02; McKinney Fellow), K. Stassun (2001 – 03; Hubble Fellow), P. Frinchaboy (2006-09; NSF Astronomy and Astrophysics Post-Doctoral Fellow), M. Sun (2018 -), M. Soares-Furtado (2020 -)

Post-Doctoral Researchers - Education: L. Hill (2016 -)

PUBLISHED WORK

Refereed Papers - Astronomy

(____ = mentee with RDM while doing work)

Turner, E.L., Aarseth, S.J., Gott, J.R.,III, Blanchard, N.J. & Mathieu, R.D., "N-Body Simulations of Galaxy Clustering. III. Groups of Galaxies", 1979, ApJ 228, 684.

Snow, T.P., Peters, G.J. & Mathieu, R.D., "A Survey of Ultraviolet Circumstellar Absorption Lines in the Spectra of Early Be and Shell Stars", 1979, ApJS 39, 359.

Spitzer, L., Jr., & Mathieu, R.D., "Random Gravitational Encounters and the Evolution of Spherical Systems. VIII. Clusters with an Initial Distribution of Binaries", 1980, ApJ 241, 618.

Mathieu, R.D. & Spinrad, H., "Luminosity Function and Colors of the 3C295 Cluster of Galaxies", 1981, ApJ 251, 485.

Elmegreen, B.G. & Mathieu, R.D., "Monte Carlo Simulations of the Initial Stellar Mass Function", 1982, MNRAS 203, 305.

Mathieu, R.D., "Dynamical Constraints on Star-Formation Efficiency", 1983, ApJL 267, L97.

Mathieu, R.D., "The Structure and Dynamics of the Open Cluster M11", 1984, ApJ 284, 643.

Beichman, C.A., Myers, P.C., Emerson, J.R., Harris, S., Mathieu, R.D., Benson, P.J. & Jennings, R.J., "Candidate Proto-Stars in Nearby Molecular Cloud Cores", 1986, ApJ 307, 337.

Hartmann, L., Hewett, R., Stahler, S. & Mathieu, R.D., "Rotational and Radial Velocities of T Tauri Stars", 1986, ApJ 309, 275.

Mathieu, R.D., Latham, D.W., Griffin, R. & Gunn, J.E. "Precise Radial Velocities of Late-Type Stars in the Open Clusters M11 and M67", 1986, AJ 92, 1100.

Mathieu, R.D. & Latham, D.W., "The Spatial Distribution of Spectroscopic Binaries and Blue Stragglers in the Open Cluster M67", 1986, AJ 92, 1364.

Blitz, L., Mathieu, R.D. & Bally, J., "CO Emission from Seyfert Galaxies: Further Observations", 1986, ApJ 311, 142.

Pilachowski, C.A., Willmarth, D.W., Halbedel, E.M., Mathieu, R.D., Hobbs, L.M., Milkey, R.W. & Saha, A., "Spectroscopic Orbital Elements for a Double-Lined Binary in NGC 752", 1987, PASP 98, 1321.

Feigelson, E.D., Jackson, J.M., Mathieu, R.D., Myers, P.C. & Walter, F.W., "An X-ray Survey for Pre-Main-Sequence Stars in the Taurus-Auriga-Perseus Clouds", 1987, AJ 94, 1251.

Myers, P.C., Fuller, G.A., Mathieu, R.D., Beichman, C.A., Benson, P.J. & Schild, R.E., "Near-Infrared

- and Optical Observations of IRAS Sources In and Near Dense Cores", 1987, ApJ 319, 340.
- Mathieu, R.D. & Mazeh, T., "The Age Determination of Open Clusters: A New Clock", 1988, ApJ 326, 256.
- Mathieu, R.D., Benson, P.J., Fuller, G.F., Myers, P.C. & Schild, R.E., "The Morphology and Kinematics in the Vicinity of the L43 Molecular Outflow", 1988, ApJ 330, 385.
- Walter, F.M., Brown, A., Mathieu, R.D., Myers, P.C. & Vrba, F.J., "X-Ray Sources in Regions of Star Formation. III. Naked T Tauri Stars Associated with the Taurus-Auriga Complex", 1988, AJ 96, 297.
- Marschall, L.M. & Mathieu, R.D., "Parenago 1540: A Pre-Main-Sequence Double-Lined Spectroscopic Binary Near the Orion Trapezium", 1988, AJ 96, 1956.
- Schild, R., Weir, N. & Mathieu, R.D., "The Optical Nebulosity Around the T Tauri Star RNO 91 in the L43 Dense Molecular Core", 1989, AJ 97, 1110.
- McNamara, B.J., Hack, W.J., Olson, R. & Mathieu, R.D., "A Proper Motion Membership Analysis of the Orion Nebula Region", 1989, AJ 97, 1427.
- Lee, C.-W., Mathieu, R.D. & Latham, D.W., "Two Spectroscopic Binaries in the Open Cluster M11 and their Implication for the Cluster Distance Modulus", 1989, AJ 97, 1710.
- Mathieu, R.D., Walter, F.M. & Myers, P.C., "The Discovery of Six Pre-Main-Sequence Spectroscopic Binaries", 1989, AJ 98, 987.
- Pilachowski, C.A., Willmarth, D.W., Mathieu, R.D., Latham, D.W., Booth, J. & Armandroff, T.E., "A Spectroscopic Binary Giant in the Galactic Cluster NGC 752", 1989, PASP 101, 991.
- Hensberge, H. *et al.*, "High Precision Radial Velocity Determinations for the Study of the Internal Kinematics and Dynamical Structure and Evolution of Young Stellar Groups", 1990, ESO Messenger, 61, 20.
- O'Neal, D., Feigelson, E.D., Mathieu, R.D. & Myers, P.C., "A Radio Survey of Weak T Tauri Stars in Taurus-Auriga", 1990, AJ 100, 1610.
- Mathieu, R.D., Latham, D.W. & Griffin, R.F., "Orbits of 22 Spectroscopic Binaries in the Open Cluster M67", 1990, AJ 100, 1859.
- Morse, J.M., Mathieu, R.D. & Levine, S.E., "The Measurement of Precise Radial Velocities of Early-type Stars", 1991, AJ 101, 1495.
- Hobbs, L.M. & Mathieu, R.D., "Observed Upper Limits on the Lithium Abundance in Blue Stragglers", 1991, PASP 103, 431.
- Mathieu, R.D., Adams, F.C. & Latham, D.W., "The T Tauri Spectroscopic Binary GW Ori", 1991, AJ 101, 2184.

- Casey, B.W., Mathieu, R.D., Suntzeff, N.B., Lee, C.-W. & Cardelli, J. A., "The Spectroscopic Orbit and Subsynchronous Rotation of the Herbig Ae/Be Star TY CrA", 1993, AJ 105, 2276.
- Walter, F.M., Vrba, F.J., Mathieu, R.D., Brown, A. & Myers, P.C., "X-Ray Sources in Regions of Star Formation. V. The Low Mass Stars of the Sco OB2 Association", 1994, AJ 107, 692.
- Daniel, S.A., Latham, D.W., Mathieu, R.D. & Twarog, B.A., "A Photometric and Radial-Velocity Analysis of the Intermediate-Age Open Cluster NGC 752", 1994, PASP 106, 281.
- Jensen, E.L., Mathieu, R.D. & Fuller, G.A., "A Connection Between Disk Mass and Separation in Young Binaries", 1994, ApJL 429, L29.
- Lee, C.-W., Martin, E.L. & Mathieu, R.D., "Relative Lithium Abundances in Pre-Main Sequence Spectroscopic Binaries", 1994, AJ 108, 1445.
- Casey, B.W., Mathieu, R.D., Suntzeff, N.B. & Walter, F.M., "The Pre-Main-Sequence Triple TY CrA: Spectroscopic Detection of the Secondary and Tertiary Components", 1995, AJ 109, 2156.
- Mathieu, R.D., Adams, F.C., Fuller, G.A., Jensen, E.L., Koerner, D.W. & Sargent, A.I., "Submillimeter Continuum Observations of the T Tauri Spectroscopic Binary GW Orionis", 1995, AJ 109, 2655.
- Metcalf, T.S., Mathieu, R.D., Latham, D.W. & Torres, G., "The Low-Mass Double-Lined Eclipsing Binary CM Draconis: A Test of the Primordial Helium Abundance and the Mass-Radius Relation near the Bottom of the Main Sequence", 1996, ApJ 456, 356.
- Jensen, E.L.N., Mathieu, R.D. & Fuller, G.A., "The Connection between Submillimeter Continuum Flux and Binary Separation in Young Binaries: Evidence of Interaction between Stars and Disks", 1996, ApJ 458, 312.
- Jensen, E.L.N., Koerner, D.W. & Mathieu, R.D., "High-resolution Imaging of Circumstellar Gas and Dust in UZ Tauri: Comparing Binary and Single-Star Disk Properties", 1996, AJ 111, 2431.
- Lacy, C.H.S., Fekel, F.C., Mathieu, R.D., Morrell, N.I., Morse, J.A., Torres, G. & Willmarth, D., "The Spectroscopic Orbit of π Ceti", 1997, AJ 113, 1088.
- Mathieu, R.D., Stassun, K., Basri, G., Jensen, E.L.N., Johns-Krull, C.M., Valenti, J. & Hartmann, L.W., "The Classical T Tauri Spectroscopic Binary DQ Tau. I. Orbital Elements and Light Curves", 1997, AJ 113, 1841.
- Jensen, E.L.N. & Mathieu, R.D., "Evidence for Cleared Regions in the Disks Around Pre-Main-Sequence Spectroscopic Binaries", 1997, AJ 114, 301.
- Basri, G., Johns-Krull, C.M., & Mathieu, R.D., "The Classical T Tauri Binary DQ Tau. II. Emission Line Variations with Orbital Phase", 1997, AJ 114, 781.
- Walter, F.M., Vrba, F.J., Wolk, S.J., Mathieu, R.D. & Neuhauser, R., "X-Ray Sources in Regions of Star Formation. VI. The R CrA Association as Viewed by EINSTEIN", 1997, AJ 114, 1544.

- Casey, B.W., Mathieu, R.D., Vaz, L.P.R., Andersen, J. & Suntzeff, N., “The Pre-Main-Sequence Eclipsing Binary TY Coronae Australis: Precise Stellar Dimensions and Tests of Evolutionary Models”, 1998, AJ 115, 1617.
- Vaz, L.P.R., Andersen, J., Casey, B.W., Clausen, J.V., Mathieu, R.D. & Heyer, I., “Four-colour photometry of eclipsing binaries. XXXIX. Light curves of the pre-main-sequence triple system TY Coronae Australis”, 1998, A&AS 130, 245.
- Mermilliod, J.-C., Mathieu, R.D., Latham, D.W. & Mayor, M., “Red Giants in Open Clusters. VII. NGC 752”, 1998, A&A 339, 423.
- Belloni, T., Verbunt, F. & Mathieu, R.D., “X-Rays from Old Open Clusters: M67 and NGC 188”, 1998, A&A 339, 431.
- Stassun, K.G., Mathieu, R.D., Mazeh, T. & Vrba, F.J., “The Rotation Period Distribution of Pre-Main-Sequence Stars in the Orion Nebula Cluster”, 1999, AJ 117, 2941.
- Van den Berg, M., Verbunt, F. & Mathieu, R.D., “Optical Spectroscopy of X-ray Sources in the Old Open Cluster M67”, 1999, A&A 347, 866.
- Dolan, C.J. & Mathieu, R.D., “A WIYN Lithium Survey for Young Stars in the λ Orionis Star-Forming Region”, 1999, AJ 118, 2409.
- Stassun, K.G., Mathieu, R.D., Vrba, F.J., Mazeh, T., & Henden, A., “A 10 μ m Search for Truncated Disks among Pre-Main-Sequence Stars with Photometric Rotation Periods”, 2001, AJ, 121, 1003.
- Dolan, C.J. & Mathieu, R.D., “The Spatial Distribution of the λ Orionis Pre-Main-Sequence Population”, 2001, AJ, 121, 2124.
- Carr, J.S., Mathieu, R.D., & Najita, J.R., “Evidence for Residual Material in Accretion Disk Gaps: CO Fundamental Emission from the T Tauri Spectroscopic Binary DQ Tau”, 2001, ApJ, 551, 454.
- Steffen, A., Mathieu, R.D., Lattanzi, M.G., Latham, D.W., Mazeh, T., Prato, L., Simon, M., & Zinnecker, H., “A Dynamical Mass Constraint for Pre-Main-Sequence Tracks: The Binary NTT 045251+3016”, 2001, AJ, 122, 997.
- Rhode, K.L., Herbst, W. & Mathieu, R.D., “Rotational Velocities of Pre-Main-Sequence Stars in the Orion Nebula Cluster”, 2001, ApJ, 122, 3258.
- Dolan, C.J. & Mathieu, R.D., “A Photometric Study of the Young Stellar Population throughout the λ Orionis Star-Forming Region”, 2002, AJ, 123, 387.
- Van den Berg, M., Stassun, K., Verbunt, F., & Mathieu, R.D., “Photometric Variability in the Open Cluster M67. I. X-ray Sources”, 2002, A&A, 382, 888.
- Stassun, K., van den Berg, M., Mathieu, R.D., & Verbunt, F., “Photometric Variability in the Open Cluster M67. II. General Survey”, 2002, A&A, 382, 899.

- Allen, L.E., Myers, P.C., Di Francesco, J., Mathieu, R.D., Chen, H. & Young, E., “HST/NICMOS Imaging Survey of the Ophiuchus (Lynds 1688) Cluster”, 2002, ApJ, 566, 993.
- Mathieu, R.D., Van den Berg, M., Torres, G., Latham, D.W., Verbunt, F., & Stassun, K.G., “Sub-Stargiants in the Old Open Cluster M67?”, 2003, AJ, 125, 246.
- Najita, J., Carr, J.S., & Mathieu, R.D., “Gas in the Inner Planet-Forming Disks: CO Fundamental Emission from Young Stars”, 2003, ApJ, 589, 931.
- Alencar, S.H.P., Melo, C.H.F., Dullemond, C.P., Andersen, J., Batalha, C., Vaz, L.P.R. & Mathieu, R.D., “The Pre-Main-Sequence Spectroscopic Binary AK Sco Revisited”, 2003, A&A, 409, 1037.
- Platais, I., Kozhurina-Platais, V., Mathieu, R.D., Girard, T.M. & van Altena, W.F., “WIYN Open Cluster Study. XVII. Astrometry and Membership to V=21 in NGC 188”, 2003, AJ, 126, 2922.
- Jensen, E.L.N., Mathieu, R.D., Donar, A.X. & Dullighan, A., “Aligned Protoplanetary Disks in Young Binaries”, 2003, AJ, 600, 789.
- Mathieu, R.D., Meibom, S. & Dolan, C.J., “WIYN Open Cluster Study. 18. The Tidal Circularization Cutoff in the Old Open Cluster NGC 188”, 2004, ApJL 121, 602L.
- Stassun, K.G., Ardila, D., Barsony, M., Basri, G. & Mathieu, R.D., “X-ray Properties of Pre-Main-Sequence Stars in the Orion Nebula Cluster with Known Rotation Periods”, 2004, AJ, 127, 3537.
- Stassun, K.G., Mathieu, R.D., Vaz, L.P.R., Stroud, N. and Vrba, F.J., “Dynamical Mass Constraints on Low-Mass Pre-Main-Sequence Evolutionary Tracks”, 2004, ApJS, 151, 357.
- Martín, E. L., Magazzù, A., Delfosse, X. & Mathieu, R. D., “The pre-main sequence spectroscopic binary UZ Tau East: Improved orbital parameters and accretion phase dependence”, 2004, A&A, 429, 939.
- Meibom, S. & Mathieu, R.D., “A Robust Measure of Tidal Circularization in Coeval Binary Populations: The Solar-Type Spectroscopic Binary Population in the Open Cluster M35”, 2005, ApJ, 620, 970.
- Stassun, K.G., Mathieu, R.D., & Valenti, J.A., “Discovery of the first eclipsing binary comprising two young brown dwarfs”, 2006, Nature, 440, 311.
- Zweibel, E.G., Hole, K.T., & Mathieu, R.D., “Star-Disk Coupling by a Time Varying Magnetic Field”, 2006, ApJ, 649, 879.
- Meibom, S., Mathieu, R.D., & Stassun, K.G., “An Observational Study of Tidal Synchronization in Solar-Type Binary Stars in the Open Clusters M35 and M34”, 2006, ApJ, 653, 621.
- Stassun, K.G., Mathieu, R.D., & Valenti, J.A., “A Surprising Reversal of Temperatures in the Brown Dwarf Eclipsing Binary 2M0535-05”, 2007, ApJ, 664, 1154.
- Reiners, A., Seifahrt, A., Stassun, K. G., Melo, C., & Mathieu, R. D., “Detection of Strong Activity in the Eclipsing Binary Brown Dwarf 2MASS J05352184-0546085: A Possible Explanation for the Temperature Reversal”, 2007, ApJ, 671, L149.

- Meibom, S., Mathieu, R.D., & Stassun, K.G., “The Effect of Binarity on Stellar Rotation – Beyond the Reach of Tides”, 2007, ApJ, 665, L155.
- Cargile, P.A., Stassun, K.G., & Mathieu, R.D., “Discovery of a New Low-Mass, Pre-Main-Sequence Eclipsing Binary in the Orion Star-Forming Region”, 2008, ApJ, 674, 329.
- Geller, A.M., Mathieu, R.D., Harris, H.C., & McClure, R.D., “WIYN Open Cluster Study XXXII: Stellar Radial Velocities in the Old Open Cluster NGC 188”, 2008, AJ, 135, 2264.
- Stassun, K.G., Mathieu, R.D., Cargile, P.A., Aarnio, A.N., Stempels, E. & Geller, A.M. “Surprising dissimilarities in a newly formed pair of “identical twin” stars”, 2008, Nature, 453, 1079.
- Meibom, S., Mathieu, R.D., & Stassun, K.G., “The Rotation Period Distribution for Late-Type Stars in the Open Cluster M35: Mass-Period Relations, Spin-Down Rates, and Gyrochronology”, 2009, ApJ, 695, 679.
- Geller, A.M., Mathieu, R.D., Harris, H.C., & McClure, R.D., “WIYN Open Cluster Study. XXXVI: Spectroscopic Binary Orbits in NGC 188”, 2009, AJ, 137, 3743.
- Morales, J.C., Ribas, I., Jordi, C., Torres, G., Gallardo, J., Guinan, E.F., Charbonneau, D., Wolf, M., Latham, D.W., Mathieu, R.D., Anglada-Escudé, G., Bradstreet, D.H., Everett, M.E., O’Donovan, F.T. & Mandushev, G., “Absolute Properties of the Low-Mass Eclipsing Binary CM Draconis”, 2009, ApJ, 691, 1400.
- Sommariva, V., Piotto, G., Rejkub, M., Bedin, L.R., Heggie, D.C., Mathieu, R.D., and Villanova, S., “A search for spectroscopic binaries in the Galactic Globular Cluster M4. Based on 5973 individual spectra collected at VLT”, 2009, A&A, 493, 947.
- Hole, K.T., Geller, A.M., Mathieu, R.D., Meibom, S., Latham, D.W., & Platais, I., “WIYN Open Cluster Study XXIV. Stellar Radial-Velocity Measurements in NGC 6819”, 2009, AJ, 138, 159.
- Mohanty, S., Stassun, K.G. & Mathieu, R.D., “Circum-Substellar Environment and Effective Temperature of the Young Substellar Eclipsing Binary 2MASS J05352184–0546085”, 2009, ApJ, 697, 713.
- Gómez Maqueo Chew, Y., Stassun, K. G., Prsa, A., & Mathieu, R. D. “Near-infrared Light Curves of the Brown Dwarf Eclipsing Binary 2MASS J05352184-0546085: Can Spots Explain the Temperature Reversal?”, 2009, ApJ, 699, 1196.
- Meibom, S., Grundahl, F., Clausen, J. V., Mathieu, R.D., Frandsen, S., Pigulski, A., Narwid, A., Steslicki, M. & Lefever, K., “Age and Distance for the Old Open Cluster NGC 188 from the Eclipsing Binary Member V 12”, 2009, AJ, 137, 5086
- Mathieu, R.D. & Geller, A.M., “A binary star fraction of 76 per cent and unusual orbit parameters for the blue stragglers of NGC 188”, 2009, Nature, 462, 1032.
- Geller, A.M., Mathieu, R.D., Braden, E.K., Meibom, S., Platais, I. & Dolan, C.J., “WIYN Open Cluster

- Study. XXXVIII. Stellar Radial Velocities in the Young Open Cluster M35 (NGC 2168)", 2010, AJ, 139, 1383.
- Meibom, S., Mathieu, R.D., Stassun, K.G., Liebesny, P. & Saar, S.H. "The Color-Period Diagram and Stellar Rotational Evolution – New Rotation Period Measurements in the Open Cluster M34", 2011, ApJ, 733, 115.
- Geller, A.M. & Mathieu, R.D., "A mass transfer origin for blue stragglers in NGC 188 as revealed by half-solar-mass companions", 2011, Nature, 478, 356.
- Gosnell, N.M., Pooley, D., Geller, A.M., Kalirai, J., Mathieu, R.D., Frinchaboy, P., & Ramirez-Ruiz, E., "An Unexpected Discovery in the Rich Open Cluster NGC 6819 Using XMM-Newton", 2012, ApJ, 745, 57.
- Chew, Y.G.M, Stassun, K.G., Prsa, A., Stempels, E., Hebb, L., Barnes, R., Heller, R. & Mathieu, R.D., "Luminosity Discrepancy in the Equal-Mass, Pre-Main Sequence Eclipsing Binary Par 1802: Non-Coevality or Tidal Heating?", 2012, ApJ, 745, 58.
- Geller, A.M. & Mathieu, R.D., "WIYN Open Cluster Study. XXXVII. The Binary Population of NGC 188", 2012, AJ, 144, 54.
- Mace, G.N., Prato, L., Torres, G., Wasserman, L.H., Mathieu, R.D. & McLean, I.S., "Dynamical Measurements of the Young Upper Scorpius Triple NTTS 155808–2219", 2012, AJ, 144, 55.
- Matheson, T. et al., "The Infrared Light Curve of SN 2011FE in M101 and Implications for the Hubble Constant", 2012, ApJ, 754, 19.
- Geller, A.M., Hurley, J.R. & Mathieu, R.D., "Binaries, Triples and Blue Stragglers within an N-body Model of the Old Open Cluster NGC 188", 2013, AJ, 145, 8.
- Sandquist, E.L., Mathieu, R.D., Brogaard, K., Meibom, S., Geller, A.M., Orosz, J.A., Milliman, K.E., Jeffries, M.W., Jr., Brewer, L.N., Platais, I., Grundahl, F., Bruntt, H., Frandsen, S. & Stello, D., "A Long-Period Totally-Eclipsing Binary Star at the Turnoff of the Open Cluster NGC 6819 Discovered with the *Kepler* Satellite", 2013, ApJ, 762, 58.
- Jeffries, M.W., Jr, Sandquist, E.L., Mathieu, R.D., Geller, A.M., Orosz, J.A., Milliman, K.E., et al., "WOCS 40007: A Detached Eclipsing Binary near the Turnoff of the Open Cluster NGC 6819", 2013, ApJ, 146, 58.
- Torres, G., Ruiz-Rodriguez, D., Badenas, M., Prato, L., Schaefer, G.H., Wasserman, L.H., Mathieu, R.D. & Latham, D.W., "The Quadruple Pre-Main Sequence System LkCa3", 2013, ApJ, 773, 40.
- Karnath, N., Prato, L., Wasserman, L.H., Torres, G., Skiff, B.A. & Mathieu, R.D., "Orbital Parameters for the Two Young Binaries VSB 111 and VSB 126", 2013, AJ, 146, 149.
- Gosnell, N.M., Mathieu, R.D., Geller, A.M., Sills, A., Leigh, C. & Knigge, C., "Detection of White Dwarf Companions to Blue Stragglers: Evidence for Recent Mass Transfer", 2014, ApJ, 783, L8.

- Tofflemire, B.M., Gosnell, N.M., Mathieu, R.D. & Platais, I., “WIYN Open Cluster Study. LVI. Radial-Velocity Membership of the Evolved Population of the Old Open Cluster NGC 6791”, 2014, AJ, 148, 61.
- Milliman, K.E., Mathieu, R.D., Geller, A.M., Gosnell, N.M., Meibom, S. & Platais, I., “WIYN Open Cluster Study. LVII. Spectroscopic Binary Orbits in NGC 6819”, 2014, AJ, 148, 38.
- Meibom, S., Barnes, S.A., Platais, I., Gilliland, R.L., Latham, D.W. & Mathieu, R.D., “A stellar clock calibrated at an age of 2.5 billion years”, 2015, Nature, 517, 589.
- Milliman, K.E., Mathieu, R.D. & Schuler, S., “WIYN Open Cluster Study. LVI. Barium Surface Abundances of Blue Stragglers in the Open Cluster NGC 6819”, 2015, AJ, 150, 84.
- Leiner, E.M., Mathieu, R.D., Gosnell, N.M. & Geller, A.M., “WIYN Open Cluster Study. LXVI. Spectroscopic Binary Orbits in the Young Open Cluster M35 (NGC 2168)”, 2015, AJ, 150, 10.
- Geller, A.M., Latham, D.W. & Mathieu, R.D., “Stellar Radial Velocities in the Old Open Cluster M67 (NGC 2682) I. Memberships, Binaries, and Kinematics”, 2015, AJ, 150, 97.
- Gosnell, N.M., Mathieu, R.D., Geller, A.M., Sills, A., Leigh, C. & Knigge, C., “Implications for the Formation of Blue Straggler Stars from HST Ultraviolet Observations of NGC 188”, 2015, ApJ, 814, 163.
- Ardila, D.R., Johns-Krull, C., Herczeg, G.J., Mathieu, R.D. & Quijano-Vodniza, A., “Magnetospheric Accretion in Close Pre-Main-Sequence Binaries, 2015, ApJ, 811, 131.
- Brewer, L.N., Sandquist, E.L., Mathieu, R.D., Milliman, K., Geller, A.M., Jefferies, M.W., Jr., Orosz, J.A., Brogaard, K.F., Platais, I., Bruntt, H., Grundahl, F., Stello, D. and Frandsen, S., “A Triple System near the Turnoff of the Open Cluster NGC 6819 and Determining Age Using *Kepler*”, 2016, AJ, 151, 66.
- Milliman, K.E., Leiner, E., Mathieu, R.D., Tofflemire, B.M. & Platais, I., “WIYN Open Cluster Study. 71. Spectroscopic Membership and Orbits of NGC 6791 Sub-Subgiants”, 2016, AJ, 151, 152.
- Stello, D., Vanderburg, A., Casagrande, L., Gilliland, R., Aguirre, V.S., Sandquist, E., Leiner, E., Mathieu, R.D. & Soderblom, D.R., “Revisiting Old Friends with K2 Reveals Oscillating Red Giants in the Open Cluster M67”, 2016, ApJ, 832, 133.
- Leiner, E., Mathieu, R., Stello, D. & Vanderburg, A., “An Evolved Blue Straggler in M67 from K2 Mission Asteroseismology”, 2016, ApJL, 832, 13.
- Tofflemire, B.M., Mathieu, R.D., Ardila, D.R., Akeson, R.L., Ciardi, D.R., Johns-Krull, C., Herczeg, G. & Quijano-Vodniza, A., “Accretion and Magnetic Reconnection in the Classical T Tauri Binary DQ Tau”, 2017, ApJ, 835, 8.
- Geller, A.M., Leiner, E.M., Bellini, A., Gleisinger, R., Haggard, D., Kamann, S., Leigh, N.W.C., Mathieu, R.D., Sills, A., Watkins, L.L. & Zure, D., “On the Origin of Sub-Subgiant Stars. I. Demographics”, 2017, ApJ, 840, 66.
- Leiner, E.M., Mathieu, R.D. & Geller, A.M., “On the Origin of Sub-Subgiant Stars. II. Binary Mass

- Transfer, Dynamical Interactions, and Magnetic Activity”, 2017, ApJ, 840, 67.
- Geller, A.M., Leiner, E.M., Chatterjee, S., Leigh, N.W.C., Mathieu, R.D., Kalogera, V. & Sills, A., “On the Origin of Sub-Subgiant Stars. III. Formation Frequencies”, 2017, ApJ, 842, 1.
- Tofflemire, B.M., Mathieu, R.D., Herczeg, G., Akeson, R.L. & Ciardi, D.R., “Pulsed Accretion in the T Tauri Binary TW 3A”, 2017, ApJL, 842, 12.
- Sandquist, E.L., Mathieu, R.D., Quinn, S.N., Pollack, M.L. et al., “The K2 M67 Study: A Curiously Young Star in an Eclipsing Binary in an Old Open Cluster”, 2018, AJ, 155, 152.
- Esselstein, R., Aigrain, S., Vanderburg, A., Smith, J.C., Meibom, S., Van Saders, J., & Mathieu, R.D., “The K2 M67 Study: Establishing the Limits of Stellar Rotation Period Measurements in M67 with K2 Campaign 5 Data”, 2018, ApJ, 859, 167.
- Leiner, E.M., Mathieu, R.D., Gosnell, N.M., & Sills, A. “Observations of Spin-down in Post-Mass-Transfer Stars and the Possibility for Blue Straggler Gyrochronology”, 2018, ApJL, 869, L29.
- Leigh, N.W.C., Panurach, T., Simunovic, M., Geller, A.M., Zurek, D., Shara, M.M., Sills, A., Knigge, C., Gosnell, N.M., Mathieu, R.D., Puzia, T.H., Ventura, J. & Minor, Q., “Constraints on blue straggler formation mechanisms in Galactic globular clusters from proper motion velocity distributions”, 2019, MNRAS, 482, 231.
- Leiner E.M., Mathieu, R.D., Vanderburg A., Gosnell N.M., & Smith J.C., “Blue Lurkers: Hidden Blue Stragglers on the M67 Main Sequence Identified from their Kepler/K2 Rotation Periods”, 2019, ApJ, 881, 47.
- Gosnell, N.M., Leiner, E.M., Mathieu, R.D., Geller, A.M., Knigge, C., Sills, A., Leigh, N.W.C., & Cargile, P., “Constraining Mass Transfer Histories of Blue Straggler Stars with COS Spectroscopy of White Dwarf Companions”, 2019, ApJ, 885, 45.
- Tofflemire, B.M., Mathieu, R.D. & Johns-Krull, C.M., “Accretion Kinematics in the T Tauri Binary TWA 3A: Evidence for Preferential Accretion onto the TWA 3A Primary”, 2019, AJ, 158, 245.
- Nine, A.C., Milliman, K.E., Mathieu, R.D., Geller, A.M., Leiner, E.M., Platais, I. & Tofflemire, B.M., “WIYN Open Cluster Study. LXXXII. Radial-Velocity Measurements and Spectroscopic Binary Orbits in the Open Cluster NGC 7789”, 2020, AJ, 160, 169.
- Laos, S., Stassun, K.G. & Mathieu, R.D., “Characterizing Spectroscopic Binary Multiplicity Fractions Using Robo-AO Imaging”, 2020, ApJ, 902, 107.
- Sandquist, E.L., Latham, D.W., Mathieu, R.D., Leiner, E.M., Vanderburg, A.M., Stello, D., Orosz, J.A., Bedin, L.R., Libralato, M., Malavolta, L., & Nardiello, D., “The K2 M67 Study: Precise Mass for a Turnoff Star in the Old Open Cluster M67”, 2021, AJ, 161, 59.
- Sun, M., Mathieu, R.D., Leiner, E.M. & Townsend, R.H.D., “WOCS 5379: Detailed Analysis of the Evolution of a Post-Mass-Transfer Blue Straggler”, 2021, ApJ, 908, 7.

Geller, A.M., Mathieu, R.D., Latham, D.W., Pollack, M., Torres, G. & Leiner, E.M., “Stellar Radial Velocities in the Old Open Cluster M67 (NGC 2682). II. The Spectroscopic Binary Population”, 2021, ApJ, 161, 190.

Brogaard, K., et al., “Age and helium content of the open cluster NGC 6791 from multiple eclipsing binary members. III. Constraints from a Subgiant”, 2021, A&A, in press.

Miller, A., Kounkel, M., Sun, M., Dixon, D., Boggio, C., Covey, K.R., Stassun, K. & Mathieu, R.D., “2M17091769+3127589: a mass-transfer binary with an extreme mass ratio”, 2021, ApJ, submitted.

Refereed Papers - Education

Brissenden, G., Slater, T. & Mathieu, R.D., “The Role of Assessment in the Development of the College Introductory Astronomy Course: A "How-to" Guide for Instructors”, 2002, Astronomy Education Review, 1, 1

Mathieu, R.D., Pfund, C. & Gillian-Daniel, D. “Leveraging the NSF Broader Impact Criteria to Influence Institutional Change in STEM Higher Education”, 2009, Change, 41, 50.

Pfund, C., Mathieu, R.D., Austin, A., Connolly, M., Manske, B. and Moore, K. “A Framework for Future Faculty Teaching and Learning Professional Development in Science, Technology, Engineering and Math (STEM)”, 2012, Change, 44, 64.

Mathieu, R.D., Austin, A.E., Barnicle, K.A., Campa III, H. & McLinn, C.M. “The Center for the Integration of Research, Teaching, and Learning: A National-Scale Network to Prepare STEM Future Faculty”, 2020, *In Approaches to Graduate Student Instructor Development and Preparation*, New Directions for Teaching and Learning, edited by K. Saichaie and C. H. Theisen. San Francisco: Jossey-Bass, 45.

Review Papers and Chapters - Astronomy

Mathieu, R.D., "The Structure and Internal Kinematics of Open Clusters", 1985, in Proceedings of IAU Symposium 113 "Dynamics of Star Clusters" (Hut & Goodman, eds.), 427.

Bodenheimer, P., Ruzmaikina, T. & Mathieu, R.D., "Stellar Multiple Systems: Constraints on the Mechanisms of Origin", 1993, in Protostars and Planets III (Levy & Lunine, eds.), 367.

Mathieu, R.D., "Pre-Main Sequence Binary Stars", 1994, ARAA, 32, 465.

Mathieu, R.D., "Observations of Discs Around Pre-Main-Sequence Binaries", 1996, in NATO Advanced Study Institute "Evolutionary Processes in Binary Stars" (Wijers, Davies & Tout, eds.), 11.

Mathieu, R.D., Ghez, A., Jensen, E.L.N. & Simon, M., “Pre-Main Sequence Binary Stars”, 2000, in Protostars and Planets IV (Mannings, Boss & Russell, eds.), 703.

Mathieu, R.D., “Pre-Main Sequence Binary Stars”, 2000, Encyclopedia of Astronomy and Astrophysics, (Emerson, ed.), 2126.

- Mathieu, R.D., "The Rotation of Low-Mass Pre-Main-Sequence Stars", 2004, in Proceedings of IAU Symposium 215 "Stellar Rotation" (Maeder & Eenens, eds.), 113.
- Mathieu, R.D., "Tidal Circularization in Open Cluster Solar-Type Binary Stars: A Decadal Review", 2005, in proceedings of the 3rd Granada Workshop on Stellar Structure "Tidal Evolution and Oscillations in Binary Stars" (Claret, Giminez & Zahn, eds.), 26.
- Briceno, C., Preibisch, T., Sherry, W.H., Mamajek, E.A., Mathieu, R.D., Walter, F.M. & Zinnecker, H., "The Low-Mass Populations in OB Associations", 2007, in Protostars and Planets V (Reipurth et al., eds.), 345.
- Mathieu, R.D., Baraffe, I., Simon, M., Stassun, K.G. & White, R., "Dynamical Mass Measurements of Pre-Main-Sequence Stars: Test of the Physics of Young Stars", 2007, in Protostars and Planets V (Reipurth et al., eds.), 411.
- Mathieu, R.D., "The λ Orionis Star-Forming Region", 2008, in Handbook of Star Forming Regions (Reipurth, ed.), 757.
- Mathieu, R.D. & Geller, A.M., "The Blue Stragglers of the Old Open Cluster NGC 188", 2014, in Ecology of Blue Straggler Stars (Boffin, Carraro & Beccari, eds.), Chapter 3.
- Clarke, C.J., Mathieu, R.D. and Reid, I.N., "Dynamics of Young Star Clusters and Associations", 2015, Saas-Fee Advanced Course 42, (Bell, C.P.M., Eyer, L. & Meyer, M.R., eds.).
- Mathieu, R.D. & Leiner, E.M., "Alternative Pathways of Stellar Evolution", 2019, in The Impact of Binaries on Stellar Evolution, (Boffin, H. M. J. & Beccari, G., eds.), 261.

Invited Papers - Astronomy

- Mathieu, R.D., "Radial-Velocity Studies of the Internal Kinematics of Open Clusters", 1985, in Proceedings of IAU Colloquium 84 "Radial Velocities" (Philip & Latham, eds.), 249.
- Kulkarni, S. & Mathieu, R.D., "Distance to the Anti-Center HI Shell", 1985, ApSS 118, 531.
- Mathieu, R.D., "The Dynamical Evolution of Young Clusters and Associations", 1986, Highlights of Astronomy 7, 481.
- Heggie, D.C. & Mathieu, R.D., "Standardised Units and Time Scales", 1986, in "The Use of Supercomputers in Stellar Dynamics" (McMillan & Hut, eds.), 233.
- Mathieu, R.D., "The Spectroscopic Binary Population among Pre-Main-Sequence Stars", 1989, Highlights of Astronomy 8, 111.
- Mazeh, T., Latham, D.W., Mathieu, R.D. & Carney, B.W., "On the Orbital Circularization of Close Binaries", 1990, in Proceedings of NATO Advanced Study Institute "Active Close Binaries" (Ibanoglu, ed.), 145.

- Mathieu, R.D., "Disks in the Pre-Main Sequence Binary Environment", 1992, in Proceedings of IAU Symposium 151 "Interacting Binary Stars" (Kondo, Sistero & Polidan, eds.), 21.
- Mathieu, R.D., "The Eccentricity Distribution of Pre-Main Sequence Binaries", 1992, in "Binaries as Tracers of Stellar Formation" (Duquennoy & Mayor, eds.), 155.
- Mathieu, R.D., Duquennoy, A., Latham, D.W., Mayor, M., Mazeh, M. & Mermilliod, J.-C., "The Distribution of Cutoff Periods with Age: An Observational Constraint on Tidal Circularization Theory", 1992, in "Binaries as Tracers of Stellar Formation" (Duquennoy & Mayor, eds.), 278.
- Latham, D.W., Mathieu, R.D., Milone, A.A.E. & Davis, R.J. "Spectroscopic Binaries in the Open Cluster M67", 1992, in "Binaries as Tracers of Stellar Formation" (Duquennoy & Mayor, eds.), 132.
- Mathieu, R.D., "The Short-Period Binary Frequency among Low-Mass Pre-Main Sequence Stars", 1992, in Proceedings of IAU Colloquium 135 "Complementary Techniques in the Study of Double and Multiple Systems" (McAlister & Hartkopf, eds.), 30.
- Matthews, L. & Mathieu, R.D., "Orbital Circularization in Binaries with A-Type Primary Stars", 1992, in Proceedings of IAU Colloquium 135 "Complementary Techniques in the Study of Double and Multiple Systems" (McAlister and Hartkopf, eds.), 244.
- Mathieu, R.D., "Binary Frequencies among Pre-Main-Sequence Stars", 1996, in "The Origins, Evolution, and Destinies of Binary Stars in Clusters" (Milone & Mermilliod, eds.), 278.
- Mathieu, R.D., "Accretion in Pre-Main-Sequence Binaries", 1997, in Proceedings of the 7th Annual Maryland Astrophysics Conference "Star Formation, Near and Far" (Holt & Mundy, eds.), 337.
- Mathieu, R.D., "The WIYN Open Cluster Study", 2000, in "Stellar Clusters and Associations: Convection, Rotation and Dynamos" (Pallavicini, Micela & Sciortino, eds.), 517.
- Stassun, K.G., Mathieu, R.D., Mazeh, T. & Vrba, F.J., "Examining the Case for Regulation of Pre-Main-Sequence Rotation by Circumstellar Disks", 2000, in "Stellar Clusters and Associations: Convection, Rotation and Dynamos" (Pallavicini, Micela & Sciortino, eds.), 309.
- Mathieu, R.D., "Assessment Tools to Drive Learning: FLAG, SALG, and Other Proven Assessments Available Online", 2000, in "Targeting Curricular Change: Reform in Undergraduate Education in Science, Math, Engineering, and Technology", AAHE.
- Mathieu, R.D., "Accretion onto Pre-Main Sequence Binary Stars: The Circumstellar Environment", 2001, in Proceedings of IAU Symposium 200 "The Formation of Binary Stars" (Zinnecker & Mathieu, eds.), 419.
- Mathieu, R.D., "Summary", 2001, in Proceedings of IAU Symposium 200 "The Formation of Binary Stars" (Zinnecker & Mathieu, eds.), 593.
- Sarajedini, A., Mathieu, R. D., & Platais, I. "WIYN Open Cluster Study: The Next Generation," 2003, in "The Future of Small Telescopes In The New Millennium. Volume III - Science in the Shadows of Giants", (Oswalt, ed.), 257.

Mathieu, R.D., “Critical Observations to Advance Tidal Theory”, 2005, in proceedings of the 3rd Granada Workshop on Stellar Structure “Tidal Evolution and Oscillations in Binary Stars” (Claret, Giminez & Zahn, eds.), 290.

Mathieu, R.D., “The Implications of Close Binary Stars for Star-Disk Interactions”, 2007, in Proceedings of IAU Symposium 243 “Star-Disk Interactions in Young Stars” (Bouvier, ed.), 315.

Mathieu, R.D., “Open Star Clusters: An Open Window on Stellar Dynamics”, 2008, in Proceedings of IAU Symposium 246 “Dynamical Evolution of Dense Stellar Systems”, (Vesperini, Gierz & Sills, eds.), 79.

Mathieu, R.D., “Blue Stragglers: At the Interface of Stellar Evolution and Stellar Dynamics”, 2010, in “International Conference on Binaries”, (Kalogera & van der Sluys, eds.), 95.

Invited Papers - Education

Mathieu, R.D., “Teaching as Research: A Concept for Change at Research Universities”, 2004, in Research and Teaching: Closing the Divide.

Mathieu, R.D., Svinicki, M. & Barger, S., “Applying Principles of Learning in the Physical Sciences and Mathematics”, 2004, in Integrating Research into Undergraduate Education: The Value Added Conference. (Reinvention Center, Conference Proceedings), 148.

Mathieu, R.D., “Preface”, 2009, in New Directions for Teaching and Learning Monograph Series. Improving the Climate for Undergraduate Teaching and Learning in STEM Fields. (San Francisco: Jossey-Bass), 117, 1.

Austin, A.E., Campa, I., Pfund, C., Gillian-Daniel, D.L., Mathieu, R.D. & Stoddart, J., “Preparing STEM Doctoral Students for Future Faculty Careers”, 2009, in New Directions for Teaching and Learning Monograph Series. Improving the Climate for Undergraduate Teaching and Learning in STEM Fields. (San Francisco: Jossey-Bass), 117, 83.

Mathieu, R.D., “Preparing the Future STEM Faculty: The Center for the Integration of Research, Teaching and Learning”, 2013, in Trajectories of Chemistry Education Innovation. (ACS Symposium Series), 185.

Austin, A. E., & Mathieu, R. D., “Shared Leadership in a National-scale Network: The Center for the Integration of Research, Teaching, and Learning (CIRTL) as a Case Example”, 2020, in Shared leadership in higher education: Responding to a changing world. (Stylus Publishing: Stylus, VA), in press.

Books

Zinnecker, H. & Mathieu, R.D., eds., 2001, Proceedings of IAU Symposium 200 “The Formation of Binary Stars”.

Abstracts and Contributed Papers – available upon request.