

Dr. Ma's Curriculum Vitae

1. Personal Particulars

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2. Education Background

1978-1982: B.S., Department of Mathematics
University of Science and Technology of China, Hefei, P.R. China
Major: Computational Mathematics
1982-1985: M.S., Graduate School of Academia Sinica, Beijing, P.R. China
Major: Applied Mathematics
1987-1990: Ph.D., Computing Center of Academia Sinica, Beijing, P.R. China
Major: Mathematical Physics

3. Professional Experience

1985-1987: Instructor and Assistant Professor
Department of Applied Mathematics
Shanghai Jiao Tong University, Shanghai, P.R. China
1990-1992: National Postdoctoral Fellow
Department of Mathematics, Fudan University, Shanghai, P.R. China
Research area: Integrable Systems and Soliton Theory
1992-1997: Associate Professor
Institute of Mathematics, Fudan University, Shanghai, P.R. China
1992-1995: Shanghai Qi Ming Xing (Outstanding Young Research Fellow)
Shanghai Government, Shanghai, P.R. China
1993-1994: Visiting Scholar
Chinese University of Hong Kong, Hong Kong, P.R. China
1994-1996: Humboldt Research Fellow

Department of Mathematics and Computer Sciences
 University of Paderborn, Paderborn, Germany
 Research area: Soliton Theory and Computer Algebra Methods

1996.6-7: Visiting Scholar
 Institute of Theoretic Physics, University of Montpellier II, Montpellier, France

1996-1997: Research Fellow
 Department of Mathematics, UMIST, Manchester, UK
 Research area: Classical and Quantum Integrable Systems

1997-2001: Research Assistant Professor and Assistant Professor
 Department of Mathematics, City University of Hong Kong
 Hong Kong, P.R. China

1999.6: Visiting Scholar
 Department of Mathematics, University of Minnesota, Minneapolis, MN, U.S.A

1999.10: Visiting Scholar
 Institute of Mathematics, Academia Sinica, Taipei, Taiwan

2000.1: Visiting Scholar
 School of Mathematical and Computer Sciences
 University of New England, Armidale, NSW, Australia

2000.2: Visiting Scholar
 Department of Mathematics, National University of Singapore, Singapore

2000.5: Visiting Scholar
 Institute of Theoretical Physics, University of Warsaw, Warsaw, Poland

2000.7,2001.6: Visiting Scholar
 Department of Mathematics, University of British Columbia, Vancouver
 BC, Canada

2001.2: Visiting Scholar
 Department of Mathematics, Brock University, St. Catharines
 Ontario, Canada

2002.1-2005.4: Assistant Professor
 Department of Mathematics, University of South Florida, Tampa, Florida, USA

2003.6: Visiting Scholar
 Department of Mathematics, Ohio State University, Columbus, OH, USA

2005-2008: Distinguished Visiting Professor
 Shandong University of Science and Technology
 579 Qianwangang Road, Qingdao, Shandong, P.R. China

2005.5-present: Associate Professor (tenured)
 Department of Mathematics, University of South Florida, Tampa, Florida, USA

2005.6: Visiting Scholar
 Department of Mathematical Sciences, Tsinghua University, Beijing, P.R. China

2006.6: Visiting Scholar

Department of Mathematics
 University of Science and Technology of China, Hefei, Anhui, P.R. China
 2006.8 Visiting Scholar
 Department of Mathematics and Graduate School
 Northern Illinois University, DeKalb, IL, USA
 2007.7-8 Visiting Professor
 School of Mathematical Sciences
 Fudan University, Shanghai 200433, P.R. China
 2007.10 Visiting Scholar
 Courant Institute of Mathematical Sciences
 New York University, New York, NY, USA
 2007.12 Research Fellow
 State Key Laboratory of Scientific and Engineering Computing
 Academia Sinica, Beijing, P.R. China
 2008.3 Visiting Scholar
 Department of Mathematics
 University of Texas - Pan American, Edinburg, TX, USA
 2008.9 Wong Kuancheng Visiting Professor
 School of Software Engineering
 East China Normal University, Shanghai 200062, China
 2008-2011 Distinguished Visiting Professor
 Shanghai University, Shanghai 200444, P.R. China
 2008-2010 Honorary Professor
 Zhejiang Normal University, Jinhua 321004, P.R. China
 2008.11 Visiting Professor
 Texas A & M University at Qatar, PO Box 23874, Doha, Qatar
 2008.12 Visiting Professor
 Institute of Mathematics
 Academia Sinica, Taipei 11529, Taiwan

4. Research Interests

Applied Mathematics: Integrability tests for differential equations (DEs)
 Symmetry constraints and Liouville integrability
 Miura, Darboux and Bäcklund transformations
 Inverse scattering transform
 Relations of DEs with infinite-dimensional Lie algebras
 Toda lattices, Pfaffian lattices, and orthogonal polynomials
 Applications of DEs in engineering science and mathematical biology
 Bifurcation and chaos

Mathematical Physics: Symmetries and conservation laws
Variational principles, Lie group method
Hamiltonian and bi-Hamiltonian theories
Advection-diffusion equations and reaction-diffusion equations
Solitons, positons, negatons, breathers and complexitons
Quantum and super-symmetric integrable systems

Symbolic Computation: Symmetries and conservation laws
Interactions of solitons, breathers and complexitons
Resonance and web structure of solitons, dromions and solitoffs
Computer-assisted theorem proofs

5. Computer Techniques and Languages Used

Maple, Mathematica, MuPAD, Maple TA

Latex, Word, Publisher, Powerpoint, Adobe Acrobat

Microsoft Windows and Unix System, Visual C++, HTTP, Java, WebCT, InterWise, Brownstone EDU

6. Synergistic Activities and Significant Achievements

(a) Served as vice director of the youth work committee of the Chinese Mechanical Society, 1991-1996; and co-organized the fifth national youth conference on mechanics and applied mathematics, China, 1990.

(b) co-edited Proceedings of Recent Advances in Integrable Systems (published by Journal of Nonlinear Mathematical Physics, 2002), and Proceedings of Integrable Systems and Special Functions (published by Journal of Computational and Applied Mathematics, 2007).

(c) Co-organized the special sessions at mathematics conferences:

Integrable systems, 1st Joint Meeting between the American Mathematical Society and Hong Kong Mathematical Society, Hong Kong, December 13-16, 2000;

Integrable systems and nonlinear waves, The 4th World Congress of Nonlinear Analysis, Orlando, FL, USA, June 30 - July 7, 2004;

Integrable systems and special functions, Joint Mathematics Meetings, Atlanta, GA, USA, January 5-8, 2005;

Continuous and discrete integrable systems and their applications, Joint Mathematics Meetings, New Orleans, LA, USA, January 5-8, 2007;

Algebraic and Geometric Aspects of Integrable Systems, Joint Mathematics Meetings, San Diego, CA, USA, January 6-9, 2008;

Nonlinear PDEs and Applications, The 6th International Conference on Differential Equations and Dynamical Systems, Baltimore, MD, USA, May 22-26, 2008;

Symmetry Methods for Applied Partial Differential Equations, The 5th World Congress of Nonlinear Analysis, Orlando, FL, USA, July 2-9, 2008.

Recent Development in Soliton Theory, The Sixth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, Georgia USA, March 23-26, 2009.

- (d) Developed the on-line practice and test question banks for College Algebra at University of South Florida by the Brownstone EDU system (<http://shell.cas.usf.edu:9082/classes/Collateralized/>), 2004-2007.
- (e) Initiated and organized the 2006 Chinese New Year Celebration of Tampa Bay as the chair of the celebration committee, Tampa, Florida, USA, 2005-2006.
- (f) Gave lectures at the Winter School on Nonlinear Waves, The China Center of Advanced Science and Technology, Beijing, P.R. China, 2007.
- (g) Contributed to “Encyclopedia of Nonlinear Science”, Routledge, 2004 September (<http://www.routledge-ny.com/ref/nonlinearsci/>).
- (h) In collaboration with Benno Fuchssteiner, Ph.D., developed a representation theory of master symmetries for discrete integrable equations (W. X. Ma and B. Fuchssteiner, Algebraic structure of discrete zero curvature equations and master symmetries of discrete evolution equations, *Journal of Mathematical Physics*, **40**(1999), no. 5, 2400-2418).
- (i) Developed Lie algebraic theory for Lax representations and zero curvature equations (Chapter 4 of *Multi-Hamiltonian Theory of Dynamical Systems* by M. Blaszak, Texts and Monographs in Physics, Springer-Verlag, Berlin, 1998).
- (j) Proved Zakharov’s conjecture on the existence of recursion operators in 2+1 dimensional bi-Hamiltonian theory (W. X. Ma, Integrable Coupling of Soliton Equations by Perturbations *Methods and Applications of Analysis*, **7**(2000), no. 1, 21-56).
- (k) Presented a method of symmetry constraints and separation of variables for soliton equations (W. X. Ma and Z. X. Zhou, Binary symmetry constraints of N -wave interaction equations in $1 + 1$ and $2 + 1$ dimensions, *Journal of Mathematical Physics*, **42**(2001), 4345-4382).

7. Research Fellowships and Distinctions Awarded

- 1990: National Postdoctoral Fellowship, Class A, P.R. China
- 1991: Thesis Award of Shanghai Association of Science and Technology, P.R. China
- 1992: Thesis Award of Chinese Association of Science and Technology, P.R. China
- 1993: Shanghai Outstanding Youth Research Fellowship, P.R. China
- 1994: Humboldt Research Fellowship, Germany
- 1996: Forward Award of Excellence for Research, Fudan University, P.R. China
- 1999: New Century Award, Barons Who's Who, USA
- 2000: The Who's Who Medal, The Who's Who Institute, USA
- 2003: Internal Research Award, University of South Florida, USA
- 2003: Forward Award of Excellence for Research, Fudan University, P.R. China
- 2004: Faculty Development Award, College of Arts and Sciences
University of South Florida, USA
- 2005: Visiting Professorship, Shandong University of Science and Technology
Qingdao, P.R. China
- 2005: Service Excellence Award, USF Chinese School, Florida, USA
- 2007: Outstanding Service Award
Chinese-American Association of Tampa Bay, Florida, USA
- 2007: Research Fellowship, State Key Laboratory of Scientific and Engineering Computing
Academia Sinica, Beijing, P.R. China
- 2007: Award of Chunlan Plan
The Ministry of Education of China, P.R. China
- 2008: Faculty Development Award, College of Arts and Sciences
University of South Florida, USA
- 2008: Visiting Professorship, Wong Kuancheng Foundation, P.R. China

Included in:

- 1998: Who's Who in the World
(15th Edition, Reed Elsevier Inc.)
- 1998: Asia/Pacific-Who's Who
(1st Edition, Rifacimento International), printed on page 563
- 1999: Asia/American Who's Who
(1st Edition, Rifacimento International), printed on page 447
- 2000: Who's Who in the World
(Millennium Edition, Reed Elsevier Inc.), printed on page 1320
- 2000: Biography Today
(1st Edition, Good Morning), printed on page 441
- 2000: The International Directory of Distinguished Leadership
(9th Edition, American Biographic Institute)

- 2000: The Barons 500 - Leaders for the New Century
(2000 Commemorative Edition, Barons Who's Who), printed on page 294
- 2000: Reference Asia, Asia's Who's Who of Men & Women of Achievement
(Millennium Edition, Rifacimento International), printed on page 327
- 2001: Who's Who in the World
(18th Edition, Reed Elsevier Inc.)
- 2002: Who's Who in America
(57th Edition, Marquis Who's Who)
- 2002: Asia - Men & Women of Achievement
(Reguerdon Sdn. Bhd.)
- 2003: Asia/Pacific Who's Who (Vol. IV, Rifacimento International)
- 2003: Reference Asia: Asia's Who's Who of Men and Women of Achievement
(Revised Edition - Vol. I, Rifacimento International)
- 2004: Biography Fame International (Vol. VII, Biography International)
- 2005: Asia/American Who's Who (Vol. IV, Rifacimento International)
- 2005: Biography Today (Vol. III, Rifacimento International)
- 2005: Distinguished & Admirable Achievers (2nd Edition, South-Asia (INTL.) PUB. CO.)
- 2005: Marquis Who's Who in Science and Engineering (9th Edition)
- 2006: Asia/Pacific Who's Who (Vol. VI, Rifacimento International), printed on page 363
- 2006: Afro-Asian Who's Who (Vol. I, Rifacimento International), printed on page 260
- 2007: Asia/Pacific Who's Who (Vol. VII, Rifacimento International), printed on page 372
- 2007: Asia/American Who's Who (Vol. V, Rifacimento International)
- 2008: Asia/Pacific Who's Who (Vol. VIII, Rifacimento International)
- 2008: Asia/American Who's Who (Vol. VI, Rifacimento International)
- 2009: Asia/Pacific Who's Who (Vol. IX, Rifacimento International)

8. Membership of Professional Bodies

- 1989-1991: The Chinese Youth Society of Mechanics
- 1991-present: The American Mathematical Society
- 1991-1996: The Chinese Mechanical Society
- 1992-present: The Chinese Society of Industrial and Applied Mathematics
- 1992-present: The Chinese Mathematical Society
- 1994-2001: Shanghai Center for Nonlinear Science
- 1997-2002: The Hong Kong Mathematical Society
- 1999-2008: The Mathematical Association of America
- 2000-2002: International Federation of Nonlinear Analysts
- 2004-present: The maple-expert Yahoo Group
- 2004-2008: Society of Industrial and Applied Mathematics
- 2007-present: International Association of Mathematical Physics

9. Funded Research Projects

- 1984: Algebraic Theory of Soliton Equations
National Natural Science Foundation of China, P. R. China, Associate Investigator
- 1986: Hamiltonian and Numerical Methods for Soliton Equations
Shanghai Jiao Tong University, P.R. China, Principal Investigator
- 1990: Nonlinear Partial Differential Equations
National Postdoctoral Science Foundation of China, P.R. China, Principal Investigator
- 1992: Nonlinearization of Lax Pairs
Fudan University, Shanghai, P.R. China, Principal Investigator
- 1993: Symmetries and Exact Solutions of Nonlinear Evolution Equations
National Natural Science Foundation of China, P.R. China, Principal Investigator
- 1994: Integrable Systems and Soliton Theory
Shanghai Outstanding Youth Research Fund
Shanghai Association of Science and Technology, P.R. China, Principal Investigator
- 1995: Integrable Theory of Nonlinear Evolution Equations
Alexander von Humboldt Foundation, Germany, Principal Investigator
- 1997: Symmetry Theory of Soliton Equations
(Project no.: 7000756) City University of Hong Kong, Principal Investigator
- 1998: Algebraic Structures Related to Nonlinear Integrable Systems
(Project no.: 7000803) City University of Hong Kong, Principal Investigator
- 1998: Integrable Algebraic Theory of Soliton Equations
(Project no.: 9040395)
Research Grants Committee of Hong Kong, Principal Investigator
- 1999: Constrained Flows of Soliton Hierarchies by Symmetry Constraints
(Project no.: 7000945) City University of Hong Kong, Principal Investigator
- 1999: Integrability of Constrained Flows and Separation of Variables of Soliton Equations
(Project no.: 904066)
Research Grants Committee of Hong Kong, Principal Investigator
- 2000: Theory of Nonlinearization of Lax Pairs with Applications
(Project no.: 7001041) City University of Hong Kong, Principal Investigator
- 2001: Integrable Reductions of Soliton Equations from Infinite-Dimensions to
Finite-Dimensions by Symmetry Constraints
(Project no.: 7001178) City University of Hong Kong, Principal Investigator
- 2001: Binary Constrained Flows and Soliton Equations with Self-Consistent Sources
(Project no.: 7001288) City University of Hong Kong, Principal Investigator
- 2002: The Theory of Symmetry Constraints of Soliton Equations
(Project no.: 1249-936RO) University of South Florida, USA, Principal Investigator
- 2004: Method of Symmetry Constraints in Soliton Theory
Faculty Development Project, College of Arts and Sciences

- University of South Florida, USA, Principal Investigator
- 2005: International Travel Grant
Zhejiang Normal University, Jinhua, P.R. China
- 2006: International Travel Grant
National Natural Science Foundation, P.R. China
- 2007: Chunhui Project, Collaborative Research on Integrable Systems
The Ministry of Education of China, P.R. China, Principal Investigator
- 2007: International Travel Grant
College of Arts and Sciences, University of South Florida, USA
- 2008: Computing Integrable Decompositions for Soliton Equations
Faculty Development Project, College of Arts and Sciences
University of South Florida, USA, Principal Investigator
- 2008: Solving Soliton Equations by Symmetry Constraints
Established Research Grant
University of South Florida, USA, Principal Investigator
- 2009: International Workshop on Nonlinear and Modern Mathematical Physics
Conference Coordination Grant, College of Arts and Sciences
University of South Florida, USA, Principal Investigator

10. Members of Editorial Boards

- 1999-2002: Editor of Journal of Nonlinear Mathematical Physics
- 2003-present: Editor of Far East Journal of Applied Mathematics
- 2005-present: Editor of International Journal of Applied Mathematics & Statistics
Editor of Antarctica Journal of Mathematics
- 2006-present: Editor of Pacific Journal of Mathematical Sciences
Editor of International Journal of Nonlinear Dynamical Systems
- 2007-present: Editor of Modern Physics Letters B
Editor of International Journal of Modern Physics B
Editor of Advances in Mathematical Sciences Journal
Editor of International Journal of Mathematical Analysis
Editor of Global Journal of Pure and Applied Mathematics
Editor of Journal of Mathematical Sciences: Advances and Applications
- 2008-present: Editor of Advances in Mathematical Physics
Editor of Journal of Mathematical Sciences: Advances and Applications
- 2009-present: Editor of International Journal of Differential Equations
Editor of Advances in Applied Mathematics and Mechanics

11. Professional Services

- 1991-present: Reviewer of Mathematical Reviews

- The American Mathematical Society
- 1994-present: Referee of National Natural Science Foundation of China
- 1999-present: Reviewer of Zentralblatt MATH
Springer-Verlag and the European Mathematical Society
- 2001-present: Referee of National Science Foundation of USA
- 2004: Maple beta Tester for Maple 9.5, Maplesoft, Canada
- 2005-present: Referee of Natural Sciences and Engineering Research Council of Canada
- 2006-present: Referee of the Royal Society, England
- 2008-present: Referee for the State Natural Science Award of China
National Office for Science and Technology Awards, China
- 2008-present: Referee of the Scientific and Technological Research Council of Turkey
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- 1990-1991: Member of Board of Directors
The Chinese Youth Society of Mechanics
- 1991-1996: Vice Director of the Committee of Youth Work
The Chinese Mechanical Society
- 1994-1998: Member of the Work Committee
Shanghai Center for Nonlinear Science
- 1995-2001: Member of Computer Service Committee
The Association of Chinese Students and Scholars in Germany
- 2004-2005: Chair of USF Asian Alliance of Faculty and Staffs
University of South Florida, Florida, USA
- 2006-2007: President of Chinese-American Association of Tampa Bay
Florida, USA
- 2006-2007: Chair of the Lecture Series Committee of Department of Mathematics
University of South Florida, Florida, USA
- 2006-2007: Chair of the Program Committee, Asia Fest 2007
Hillsborough County, Florida, USA
- 2007-2008: Chair of the Advisory Committee of Department of Mathematics and Statistics
University of South Florida, Florida, USA
- 2009: Chair of the Activities Committee of Confucius Insitute
University of South Florida, Florida, USA
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- 1988-present: Referee of Acta Mathematica Sinica
Acta Mathematicae Applicatae Sinica
Annuals of Differential Equations
Applied Mathematics and Computation
Applied Mathematics Letters
Applied Mathematical Modelling
Chaos, Solitons & Fractals

Chinese Annals of Mathematics, Series A and B
Chinese Physics Letter
Chinese Science Bulletin
Communications in Mathematical Physics
Communications in Nonlinear Science and Numerical Simulations
Computers and Mathematics with Applications
Computer Physics Communications
European Journal of Applied Mathematics
Europhysics Letters
Far East Journal of Applied Mathematics
International Journal of Applied Mathematics & Statistics
International Journal of Applied Mechanics
International Journal of Computational Fluid Dynamics
International Journal of Computer Mathematics
International Journal of Computers and Mathematics with Applications
International Journal of Mathematics and Mathematical Sciences
International Journal of Modern Physics A and B
International Journal of Neural Systems
International Journal of Theoretical Physics
Inverse Problems
Journal of Computational and Applied Mathematics
Journal of Computational Mathematics
Journal of Mathematical Analysis and Applications
Journal of Mathematical Physics
Journal of Nonlinear Analysis
Journal of Nonlinear Mathematical Physics
Journal of Partial Differential Equations
Journal of Physics A: Mathematical and General
Journal of Optics A: Pure and Applied Optics
Journal of Zhejiang University - Science A
Mathematics and Computers in Simulation
Modern Physics Letters A & B
Nonlinearity
Nuovo Cimento A & B
Physica A & D
Physica Scripta
Physics Letters A & B
Proceedings of the American Mathematical Society
Science in China (Series A)
Symmetry, Integrability and Geometry: Methods and Applications

12. Research Activities Organized

- 1992-1994: Co-organizer, Joint Lecture Series on Nonlinear Sciences
Fudan University, Shanghai, P.R. China
- 1997-2002: Co-organizer, Joint Seminars on Solitons
Hong Kong Baptist University and City University of Hong Kong
Hong Kong, P.R. China
- 1999.3: Co-organizer, Workshop on Integrable Systems
Hong Kong University of Science and Technology, Hong Kong, P.R. China
- 2000.4: Co-organizer, Workshop on Soliton Theory and Integrable Systems
City University of Hong Kong, Hong Kong, P.R. China
- 2000.10: Co-organizer, Special Session on Integrable Systems
First Joint International Meeting between the American Mathematical
Society and the Hong Kong Mathematical Society, Hong Kong, P.R. China
- 2004.6: Co-organizer, Special Session on Integrable Systems and Nonlinear Waves
Fourth World Congress of Nonlinear Analysts, Orlando, FL, USA
- 2005.1: Co-organizer, AMS-SIAM Special Session on
Integrable Systems and Special Functions
Joint Mathematics Meetings, Atlanta, GA, USA
- 2005-2006: Co-organizer, Joint Seminars on Mathematical Physics
University of South Florida and University of Central Florida
Florida, USA
- 2007.1: Co-organizer, AMS Special Session on
Continuous and Discrete Integrable Systems and Their Applications
Joint Mathematics Meetings, New Orleans, LA, USA
- 2008.1: Co-organizer, AMS Special Session on
Algebraic and Geometric Aspects of Integrable Systems
Joint Mathematics Meetings, San Diego, CA, USA
- 2008.5: Co-organizer, Special Session on Nonlinear PDEs and Applications
The 6th Int. Conference on Differential Equations and Dynamical Systems
Baltimore, MD, USA
- 2008.7: Co-organizer, Special Session on
Symmetry Methods for Applied Partial Differential Equations
The 5th World Congress of Nonlinear Analysis, Orlando, FL, USA
- 2009.3: Co-organizer, Special Session on
Recent Development in Soliton Theory
The Sixth IMACS International Conference on Nonlinear Evolution Equations
and Wave Phenomena: Computation and Theory, Athens, GA, USA

13. Conferences and Workshops Participated

- 1989.5: Invited speaker
International Conference on Nonlinear Physics, Shanghai, P.R. China
- 1990.6: Plenary speaker
The Fourth Annual Conference of the Chinese Youth Society of Mechanics
Qingdao, P.R. China
- 1991.7: Paper presenter
The 21st International Conference on Differential Geometry Methods
in Theoretical Physics, Tianjin, P.R. China
- 1992.6: Participant
International Conference on Differential Geometry, Shanghai, P.R. China
- 1992.6: Invited speaker
The 2nd Conference of the Chinese Society of Industrial and Applied Mathematics
Shanghai, P.R. China
- 1992.8: Invited speaker
The CAST 1st Academic Annual Meeting of Youths
The Chinese Association of Science and Technology, Beijing, P.R. China
- 1993.7: Invited speaker
The 1st Academic Annual Meeting of Chinese Post-doctors
The National Postdoctoral Science Foundation of China, Beijing, P.R. China
- 1994.6: Invited speaker
International Conference on Nonlinear Evolution Equations, Beijing, P.R. China
- 1994.8: Young participant supported by International Mathematical Union
International Congress of Mathematicians 1994, ETH, Zurich, Switzerland
- 1995.7: Invited speaker
The First International Conference of Nonlinear Physics
(Theory and Experiment), Gallipoli, Italy
- 1996.6: Participant
International School - The Painleve Property, One Century Later, Cargese, France
- 1996.7: Invited speaker
Symmetries and Integrability of Difference Equations II, Canterbury, UK
- 1997.6: Paper presenter
The First Pan-China Conference on Differential Equations, Kunming, P.R. China
- 1997.10: Invited speaker
International Conference on Nonlinear Systems, Solitons and Geometry
Oberwolfach, Germany
- 1998.6: Invited speaker
International Conference on Integrable Systems: Solutions and Transformations
Guardamar, Spain

- 1998.6: Invited speaker
The 12th Workshop on Nonlinear Evolution Equations and Dynamical Systems
Leeds, UK
- 1999.6: Invited speaker
AARMS-CRM Workshop on Bäcklund & Darboux Transformations:
The Geometry of Soliton Theory, Halifax, Nova Scotia, Canada
- 1999.6: Paper presenter
International Workshop on Special Functions:
Asymptotics, Harmonic Analysis, and Mathematical Physics
Hong Kong, P.R. China
- 1999.7: Invited speaker
International Conference on Applied Partial Differential Equations
Shanghai, P.R. China
- 1999.10: Paper presenter
International Conference on Nonlinear Analysis, Taipei, Taiwan
- 2000.1: Invited speaker
International Conference on Integrable Systems: Kruskal 2000
Adelaide, Australia
- 2000.6: Invited speaker
The 32nd Symposium on Mathematical Physics, Torun, Poland
- 2000.7: Invited speaker
The Third World Congress of Nonlinear Analysts
Editorial Board Meeting of Journal of Nonlinear Mathematical Physics
Catania, Italy
- 2000.10: Invited speaker (45-minutes)
The Third Asian Mathematical Conference (AMC 2000), Manila, Philippines
- 2001.1: Plenary speaker
International Conference on Nonlinear Evolution Equations
and Infinite Dimensional Dynamical Systems, Bangkok, Thailand
- 2001.5: Plenary speaker
International Conference on Nonlinear Evolutionary Equations
and Their Numerical Methods, Xiamen, P.R. China
- 2002.10: Invited speaker
AMS Sectional Meetings, Orlando, FL, USA
- 2002.12: Invited speaker
The 27th Suncoast Regional MAA Meeting, Lakeland, FL, USA
- 2004.6: Invited speaker
The 4th World Congress of Nonlinear Analysts, Orlando, FL, USA
- 2004.10: Invited speaker
SIAM Conference on Nonlinear Waves and Coherent Structures, Orlando, FL, USA

- 2005.1 Invited speaker
Joint Mathematics Meetings, Atlanta, GA, USA
- 2005.6 Invited speaker (45-minutes)
1st International Conference on Recent Advances in Bifurcation Theory and Applications of Dynamical Systems, Jinhua, Zhejiang, P.R. China
- 2005.8 Invited speaker
International Conference on Differential & Difference Equations and Applications
Florida Institute of Technology, Melbourne, FL, USA
- 2007.1: Invited speaker
Joint Mathematics Meetings, New Orleans, LA, USA
- 2007.8: Invited speaker
7th National Conference on Solitons and Integrable Systems, Xuzhou, Jiangsu, China
- 2008.1: Invited speaker
Joint Mathematics Meetings, San Diego, CA, USA
- 2008.3: Invited speaker
Workshop on Solitons and Integrable Systems, Edinburg, TX, USA
- 2008.3: Invited speaker
32nd SIAM Southeastern-Atlantic Section Conference, Orlando, FL, USA
- 2008.5: Invited speaker
The 7th AIMS International Conference on Dynamical Systems, Differential Equations and Applications, Arlington, TX, USA
- 2008.5: Invited speaker
The 6th International Conference on Differential Equations and Dynamical Systems
Baltimore, MD, USA
- 2008.7: Invited speaker (one-hour)
The Fifth World Congress of Nonlinear Analysts, Orlando, FL, USA
- 2008.10 Invited speaker
International Conference on Nonlinear Mathematical Physics, Jinhua, PR China
- 2009.3: Session speaker
25th Southeastern Analysis Meeting, Tampa, Florida, USA
- 2009.3: Invited speaker
The Sixth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, USA

14. Invited Seminars and Colloquia

- 1990: Colloquium speaker
Institute of Computational Mathematics, Chinese Academy of Sciences
Beijing, P.R. China
- 1991: Lecture series speaker
Department of Mathematics, Zhengzhou University, Zhengzhou, P.R. China

- 1991: Colloquium speaker
Department of Applied Mathematics, Shanghai Jiao Tong University
Shanghai, P.R. China
- 1992: Colloquium speaker
Institute of Mathematics, Fudan University, Shanghai, P.R. China
- 1993: Colloquium speaker
Shanghai Institute of Applied Mathematics and Mechanics
Shanghai University, Shanghai, P.R. China
- 1994: Colloquium speaker
Department of Mathematics, University of Hong Kong, Hong Kong, P.R. China
- 1995: Seminar speaker
Department of Mathematics, University of Paderborn, Paderborn, Germany
- 1996: Colloquium speaker
Department of Mathematics, University of Kassel, Kassel, Germany
- 1996: Colloquium speaker
Institute of Theoretic Physics, University of Montpellier II, Montpellier, France
- 1997: Colloquium speaker
Department of Mathematics, UMIST, Manchester, UK
- 1998: Colloquium speaker
Department of Mathematics, Hong Kong Baptist University, Hong Kong, P.R. China
- 1999: Seminar speaker
School of Mathematics, University of Minnesota, Minneapolis, MN, USA
- 1999: Colloquium speaker
Department of Mathematics, Hong Kong Baptist University, Hong Kong, P.R. China
- 2000: Colloquium speaker
School of Mathematical and Computer Sciences, University of New England
Armidale, NSW, Australia
- 2000: Colloquium speaker
Department of Mathematics, National University of Singapore, Singapore
- 2000: Colloquium speaker
Institute of Theoretical Physics, University of Warsaw, Warsaw, Poland
- 2001: Colloquium speaker
Department of Mathematics, Chinese University of Hong Kong
Hong Kong, P.R. China
- 2001: Colloquium speaker
Department of Mathematics, Brock University, St. Catharines, Ontario, Canada
- 2001: Colloquium speaker
Department of Mathematics, City University of Hong Kong, Hong Kong, P.R. China
- 2001: Colloquium speaker
Department of Mathematics, Zhongshan University, Guangzhou, P.R. China

- 2001: Colloquium speaker
Department of Mathematics, University of South Florida, Tampa, FL, USA
- 2003: Seminar speaker
Department of Mathematics, University of Central Florida, Orlando, FL, USA
- 2003: Seminar speaker
Department of Mathematics, Ohio State University, Columbus, OH, USA
- 2003: Colloquium speaker
Department of Mathematical Sciences, Northern Illinois University
DeKalb, IL, USA
- 2005: Colloquium speaker
Department of Applied Mathematics, Tsinghua University, Beijing, P.R. China
- 2005: College colloquium speaker
College of Information Science and Engineering
Shandong University of Science and Technology, Qingdao, P.R. China
- 2005: Colloquium speaker
Department of Mathematics, Beijing University, Beijing, P.R. China
- 2005: Colloquium speaker
College of Sciences, Zhejiang Normal University, Jinhua, Zhejiang, P.R. China
- 2005: Colloquium speaker
Department of Mathematics, Northwest University, Xi'an, Shaanxi, P.R. China
- 2005: Colloquium speaker
School of Mathematical Sciences
Xuzhou Normal University, Xuzhou, Jiangsu, P.R. China
- 2005,06: Colloquium speaker
Institute of Mathematics, Fudan University, Shanghai, P.R. China
- 2005,06: Colloquium speaker
Department of Mathematics, University of Science and Technology of China
Hefei, Anhui, P.R. China
- 2005,06: Colloquium speaker
Department of Mathematics, Shanghai University, Shanghai, P.R. China
- 2006: Graduate colloquium speaker
Graduate School, Northern Illinois University
DeKalb, IL, USA
- 2007: Colloquium speaker
School of Mathematical Sciences, Fudan University
College of Sciences, University of Shanghai for Science and Technology
Department of Mathematics, Shanghai Jiaotong University
Shanghai, P.R. China
- 2007: Colloquium speaker
Department of Mathematics, University of Science and Technology

- Hefei, Anhui, P.R. China
- 2007: Seminar speaker
 Courant Institute of Mathematical Sciences, New York University
 New York, NY, USA
- 2007: Colloquium speaker
 Institute of Systems Science, Academia Sinica
 Department of Mathematical Sciences, Tsinghua University
 Morningside Center of Mathematics, Academia Sinica
 College of Sciences, China University of Mining & Technology (Beijing)
 Beijing Institute of Applied Physics and Computational Mathematics
 Institute of Mathematics, Academia Sinica
 Beijing, P.R. China
- 2007: Colloquium speaker
 Department of Applied Mathematics, Dalian University of Technology
 Mathematical School, Liaoning Normal University
 Dalian, P.R. China
- 2008: Colloquium speaker
 Department of Mathematics, Capital Normal University, Beijing, P.R. China
- 2008: Colloquium speaker
 School of Software Engineering, East China Normal University, Shanghai
 College of Sciences, Ningbo University, Ningbo
 Department of Mathematics, Shanghai University, Shanghai
 College of Math., Phys. and Info. Engineering, Zhejiang Normal University, Jinhua
 College of Sciences, Shaoxing University, Shaoxing
 Institute of Mathematics, Zhejiang University, Hangzhou
 College of Info. Science and Tech., Shandong Univ. of Science and Technology, Tsingdao
 Department of Mathematics, Zhengzhou University, Zhengzhou
 Department of Mathematics and
 School of Naval Architecture, Ocean and Civil Engineering
 Shanghai Jiaotong University, Shanghai, P.R. China
- 2008: Colloquium speaker
 Department of Mathematics, Hong Kong Baptist University, Hong Kong
 Institute of Mathematics, Academia Sinica, Taipei
 Department of Business Mathematics, Soochow University, Taipei
 The National Center for Theoretical Sciences, Tsinghua University, Hsinchu
 Department of Applied Mathematics, National Chiao Tung University, Hsinchu, Taiwan
- 2009: Colloquium speaker
 Southern Polytechnic State University, Marietta, Georgia

15. Publications

15.1. Journal papers

- [1] W. X. Ma, X. Gu and L. Gao, A note on exact solutions to linear differential equations by the matrix exponential, *Advances in Applied Mathematics and Mechanics*, 2009
- [2] W. X. Ma and J. H. Lee, A transformed rational function method and exact solutions to the $3 + 1$ dimensional Jimbo-Miwa equation, *Chaos, Solitons & Fractals*, 2009
- [3] W. X. Ma, R. G. Zhou and L. Gao, Multi-periodic wave solutions to Hirota integrable equations in $2 + 1$ dimensions, *Modern Phys. Lett. A*, 2009
- [4] W. X. Ma and B. Shekhtman, Do the chain rules for matrix functions hold without commutativity? *Linear and Multilinear Algebra*, 2009
- [5] W. X. Ma and L. Gao, Coupling integrable couplings, *Modern Phys. Lett. B*, 2009
- [6] W. X. Ma, C. X. Li and J. S. He, A second Wronskian formulation of the Boussinesq equation, *Nonlinear Anal.*, Vol.70(2009), 4245-4258
- [7] W. X. Ma, Multi-component bi-Hamiltonian Dirac integrable equations, *Chaos, Solitons & Fractals*, Vol.39(2009), 282-287
- [8] W. X. Ma, An application of the Casoratian technique to the 2D Toda lattice equation, *Modern Physics Letters B*, Vol.22(2008), 1815-1825
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