

CURRICULUM VITAE ET STUDIORUM FERDINANDO MORA

Graduated in Mathematics at Genoa University on July 16, 1974.

Research activities at Genoa University since November 1974 to October 1979.

Teaching position (Istituzioni di Matematiche I - Chimici) at Genoa University since November 1979 to June 1985 (a course on Calculus for Chemistry students)

Researcher at the Mathematical Institute - Engineering Faculty - Genoa University since August 1980 to June 1985

Associate Professor at the Science Faculty - Genoa University since July 1985 to May 1987.

Full Professor in Algebra at the Science Faculty - Basilicata University since May 1987 to October 1987.

Full Professor in Algebra at the Science Faculty - Genoa University since November 1987.

Invited speaker at:

- Congress on Computational Geometry and Topology, Sevilla, September 87
- International Workshop on Algorithmic Aspects of Geometry and Algebra, Cornell, July 1988
- International Workshop on Groebner Bases, Cornell, October 1988
- INTSEM Course "Computer, Algebra and Logic", Leipzig, October 1988
- AAECC-7 Conference on Applied Algebra, Algebraic Algorithms and Error Correcting Codes, Toulouse, June 1989
- Malcev Conference on Algebra, Novosibirsk September 1989
- Mid Atlantic Conference on Computer Algebra, GMU May 1992
- Symposium and workshop on Semigroups Languages and Combinatorics on Words, Kyoto August 1992
- Applicable Algebra, Oberwolfach, February 1993
- Computational Methods in Lie Theory, Ascona, March 1993
- Commutative Algebra, Combinatorics and Computer Algebra, Essen, June 1993
- Computational aspects of Commutative Algebra and Algebraic Geometry, Oberwolfach, May 1995
- Conference on Symbolic Rewriting Techniques, Ascona, May 1995
- Primo Encuentro de Algebra Computacional y Aplicaciones, Santander, September 1995
- Segundo Encuentro de Algebra Computacional y Aplicaciones, Sevilla, September 1996
- Primera Conferencia Cientifica de Matematica y Computacion, Santiago de Cuba, November 1996
- Tercero Encuentro de Algebra Computacional y Aplicaciones, Granada, September 1997

- Meeting in Honour of Prof. F. Gaeta, Madrid, ottobre 1998
- Sexto Encruento de Algebra Computacional y Aplicaciones, Barcelona, settembre 2000
- Workshop on Under- and Overdetermined Systems of Algebraic or Differential Equations, Karlsruhe, marzo 2002
- Conference in Honour of Jacques Calmet, Logrono, 2008
- TERA 2008 en l'honneur du 60e anniversaire de Marc Giusti, Paris 2008
- Conference in Memoriam Thomas Beth, Karlsruhe 2008

Member of the Management Board of "Journal of Applicable Algebra in Engineering, Communication and Computing", Springer

Member of the Editorial Board of "Bulletin of the Iranian Mathematical Societ" since 2007 to 2013

Organizer of the meetings and schools:

- COMPUTER AND COMMUTATIVE ALGEBRA, Genova May 1986
- COMPUTER AND COMMUTATIVE ALGEBRA II, Genova May 1989
- INTERNATIONAL COURSE ON COMPUTATIONAL REAL GEOMETRY, Catania December 1988
- SCUOLA DI GEOMETRIA ED ALGEBRA COMPUTAZIONALE, Torino, July 1990
- IL CALCOLO SIMBOLICO E LE SUE APPLICAZIONI, INDUSTRIALI, Torino, October 1993
- Algebra quadrimester, CWI Amsterdam, August - October 1994

Cicle of lectures to the courses:

- Computer, Algebra and Logic, Leipzig, ottobre 88
- Encuentro Latino-America de Algebra y Geometria, Guanajuato, agosto 1992
- Computer Algebra with emphasis on discrete algebra and geometry, Eindhoven, settembre 1994
- Tutorial at the meeting ISSAC'96, Zurich July 1996
- 2008 Trieste Map Summer School, Trieste, International Center for Theoretical Physics, 2008
- International Workshop on Solving Nonlinear Polynomial Equation, Indian Institute of Science, Bangalore June 2010)

Member of the Program Committees of the meeting AAECC5, Minorca June 1987, AAECC 6, Roma July 1988, AAECC 7, Tolosa June 1989, ISSAC '89, Portland July 1989, MEGA '90, Castiglione del Tevere April 1990, AAECC 8, Tokyo August 1990, ISSAC '91, Bonn, July 1991, MEGA '92, Nice April 1992, MEGA '94, Santander April 1994, RTA '95, Kaiserslautern April 1995, SEA'95, Luminy November 1995, MEGA '96, Amsterdam April 1996, ISSAC 97, Hawaii, July 1997, 33 Years on Gröbner Bases, Linz, February 1998, Rhine Workshop on Computer Algebra, Bonn, April 1999, MEGA '98, St.Malo, June 1998, ISSAC 99, Montreal, July

1999, MEGA 2000, Bath, June 2000, ISSAC 02, Lille, luglio 2002, Rhine Workshop on Computer Algebra, Mannheim, marzo 2002, Workshop on Under- and Overdetermined Systems of Algebraic or Differential Equations, Karlsruhe, marzo 2002, A3L 2005, Passau, aprile 2005, ISSAC 05, Beijing, luglio 2005, MEGA '05, Porto Torres, giugno 2005, Computer Algebra and Informatics, Leningrado, novembre 2005, Conference in Memoriam Pina Carra, Catania 2008, 4th International Workshop on Symbolic-Numeric Computation June 7-9, 2010 San Jose, Ca, USA, MEGA 2015 Trento June 2015

Cochairman of the Program Committees of the International Meetings

AAECC 9, New Orleans, October 1991, AAECC 10, Puertorico, May 1993, AAECC 11, Paris, July 1995, AAECC 12, Toulouse, June 1997

Member of the Steering Committee of ISSAC 92, Berkeley, July 1992, ISSAC 96, Zurich, July 1996

Responsible of

- the national group CAMASA since 1990 to 1996
- local team of the CEE Project ESPRIT-BRA 6846 PoSSo 1993-95
- CEE Project HCM-Euroconferences GAME 1994-95
- CEE Project PECO 1995
- national team of the CEE Project HCM-Network SAC-net 1995-97

Publications :

-1- 2019 Articolo in rivista

Ceria, Michela, Mora, Teo, Roggero, Margherita (2019). A general framework for Noetherian well ordered polynomial reductions. JOURNAL OF SYMBOLIC COMPUTATION, ISSN: 0747-7171, doi: 10.1016/j.jsc.2019.02.002
SCOPUS: 2-s2.0-85062147861

-2- 2018 Contributo in Atti di convegno

Ceria, Michela, Mora, Teo, Visconti, Andrea (2018). Efficient Computation of Squarefree Separator Polynomials. In: (a cura di): J.H. Davenport;M. Kauers;G. Labahn;J. Urban, Mathematical Software : ICMS 2018. LECTURE NOTES IN COMPUTER SCIENCE, vol. 10931, p. 98-104, Springer, ISBN: 9783319964171, ISSN: 1611-3349, South Bend, 2018, doi: 10.1007/978-3-319-96418-8_12
SCOPUS:2-s2.0-85050632150
WOS:000455774600012

-3- 2017 Articolo in rivista

Ceria Michela, Mora Teo (2017). Buchberger-Zacharias Theory of multivariate Ore extensions. JOURNAL OF PURE AND APPLIED ALGEBRA, vol. 221, p. 2974-3026, ISSN: 0022-4049, doi: 10.1016/j.jpaa.2017.02.011
SCOPUS:2-s2.0-849846252266
WOS:000405763900004

-4- 2017 Articolo in rivista

Ceria, Michela, Mora, Teo (2017). Buchberger-Weispfenning theory for effective associative rings. JOURNAL OF SYMBOLIC COMPUTATION, vol. 83, p. 112-146, ISSN: 0747-7171, doi: 10.1016/j.jsc.2016.11.008
SCOPUS:2-s2.0-85007592109
WOS:000402227900006

-5- 2015 Articolo in rivista

CERIA, MICHELA, Mora, Teo, ROGGERO, Margherita (2015). Term-ordering free involutive bases. JOURNAL OF SYMBOLIC COMPUTATION, vol. 68, p. 87-108, ISSN: 0747-7171, doi: 10.1016/j.jsc.2014.09.005
SCOPUS:2-s2.0-84918787309
WOS:000347767600006

-6- Combinatorics of ideals of points: a Cerlienco-Mureddu-like approach for an iterative lex game (abstract) DOI: <http://dx.doi.org/10.15304/978841695487> (2018)

In 24th Conference on Applications of Computer Algebra - ACA 2018: Proceedings, Applications of Computer Algebra, Santiago de Compostela, Spain, June 18-22, 2018.

Authors: Michela Ceria, Teo Mora

-7- Weak involutive bases over effective rings (extended abstract)

International Conference Polynomial Computer Algebra '2019 St. Petersburg, Russia
April 15-20, 2019 International Euler Institute - ISBN 978-5-96511-1234-0 Author: Michela Ceria, Teo Mora

-8- Combinatorics of ideals of points: a Cerlienco-Mureddu-like approach for an iterative lex game (extended abstract)

International Conference Polynomial Computer Algebra '2018 St. Petersburg, Russia
April 16-21, 2018 International Euler Institute - ISBN 978-5-9651-1141-1 Authors: Michela Ceria, Teo Mora

-9- Zacharias representation of effective associative rings. Journal of Symbolic Computation (2019). Author : Teo Mora.
SCOPUS: 2-s2.0-85065059175

- 10 - An FGLM-like algorithm for computing the radical of a zero-dimensional ideal
Journal of Algebra and its Applications
Volume 17, Issue 1, 1 January 2018, Article number 1850002 Author : Teo Mora.
SCOPUS:2-s2.0-85030864623

- 11 - A primer on ideal theoretical operation in non-commutative polynomial rings
Journal of Algebra and its Applications

Volume 14, Issue 2, 29 March 2015, Article number 1550018 Author : Teo Mora.
SCOPUS: 2-s2.0-84928544084

Other accepted works

- 1- Weak Involutive bases over effective rings (extended abstract), accepted for a talk at ACA2019

Authors: Michela Ceria, Teo Mora.

- 2- HELP: the knight gambit for efficient decoding of BCH codes (extended abstract), accepted for a talk at ACA2019

Authors: Michela Ceria, Teo Mora, Massimiliano Sala.

- 3 - Why you cannot even hope to use Gröbner bases in cryptography: an eternal golden braid of failures (extended abstract), accepted for a talk at ACA2019

Authors: Boo Barkee, Michela Ceria, Theo Moriarty, Andrea Visconti.

Submitted works

- 1- Zech Tableaux as tools for sparse decoding. submitted. Authors: Michela Ceria, Teo Mora, Massimiliano Sala.

- 2- Efficient computation of squarefree separator polynomials, submitted
Authors: Michela Ceria, Teo Mora, Andrea Visconti.

-3- Oracle-supported drawing of the Groebner escalier, submitted
Authors : M.E. Alonso, M.G. Marinari, T. Mora.