

# Curriculum Vitae

## PERSONAL INFORMATION

Marian Aprodu



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Date of birth: August 8, 1970 | Nationality: Romanian

## WORK EXPERIENCE

- |              |                                                                                                                      |
|--------------|----------------------------------------------------------------------------------------------------------------------|
| 2015–Present | Professor<br>University of Bucharest                                                                                 |
| 2009–Present | Senior Researcher 1 – PhD Supervisor<br>"Simion Stoilow" Institute of Mathematics of the Romanian Academy, Bucharest |
| 2006–2009    | Senior Researcher 2<br>"Simion Stoilow" Institute of Mathematics of the Romanian Academy, Bucharest                  |
| 2000–2006    | Senior Researcher 3<br>"Simion Stoilow" Institute of Mathematics of the Romanian Academy, Bucharest                  |
| 1997–2000    | Researcher<br>"Simion Stoilow" Institute of Mathematics of the Romanian Academy, Bucharest                           |
| 1995–1997    | Research Assistant<br>"Simion Stoilow" Institute of Mathematics of the Romanian Academy, Bucharest                   |

## EDUCATION

- |           |                                                                                                    |
|-----------|----------------------------------------------------------------------------------------------------|
| 2002      | Habilitation thesis<br>Grenoble University - Institut Joseph Fourier, Grenoble (France)            |
| 1995–1996 | PhD in Mathematics<br>"Simion Stoilow" Institute of Mathematics of the Romanian Academy, Bucharest |
| 1994–1995 | Master degree in Mathematics<br>University of Bucharest                                            |
| 1989–1994 | Bachelor's degree in Mathematics                                                                   |

University of Bucharest

1988–1989 Military Service

1984–1988 Industrial Chemistry High-School, Corabia

## PERSONAL SKILLS

Mother tongue Romanian

## Other languages

|         | UNDERSTANDING |         | SPEAKING           |                   | WRITING |
|---------|---------------|---------|--------------------|-------------------|---------|
|         | Listening     | Reading | Spoken interaction | Spoken production |         |
| English | C1            | C1      | C1                 | C1                | C1      |
| French  | C2            | C2      | C1                 | C1                | C1      |
| German  | B1            | B2      | B1                 | B1                | B1      |
| Italian | A2            | A2      | A2                 | A2                | A2      |

Common European Framework of Reference for Languages

**Organizational skills**

- leadership: Director of the Mathematics Department of “Școala Normală Superioară” Bucharest between 2007 - 2012, member of the Council of Mathematical Doctoral of Bucharest University, member of the Scientific Council of "Simion Stoilow" Institute of Mathematics of the Romanian Academy, Bucharest, member of the Scientific Council of “Școala Normală Superioară” Bucharest
- organization of several international scientific events

**Work skills**

- acquaintance with research evaluation (former member of CNATDCU, CNCS, evaluator for the European Commission - Marie Curie Actions, evaluator for the European Science Foundation, evaluator for the NSA, referee for numerous scientific journals of high standards)
- student supervision (several Master students, four PhD students and a young researcher within the UEFISCDI Program “Bursa Tanarului Cercetator”)

**Computer skills**

- familiar with operating systems Linux, Unix
- familiar with symbolic computation systems Maple, Maxima, Macaulay2
- notions of programming (C++, Pascal)

## ADDITIONAL INFORMATION

**National Projects**

- PN-III-P4-ID-PCE-2016-0030, Moduli Spaces and Homological Methods in Geometry and Topology (2017 - 2019)

- PN-II-ID-PCE-2011-3-0288, Vector Bundle Techniques in Complex Geometry (2011 - 2016)- 24\_WE/2009, Moduli Spaces in Geometry and Physics (2009)

## Curriculum Vitae

- 24\_WE/2009, Moduli Spaces in Geometry and Physics (2009)

### International Grants / Visiting fellowships

02/1998 - 08/1999: DFG post-doctoral Fellowship (University of Bayreuth, Germany)

01/1999 - 12/2004: Junior Associate (ICTP Trieste, Italy)

01/2000 - 02/2001: Alexander von Humboldt International Co-operation Fellowship  
(Institutul Joseph Fourier, Grenoble, France)

08/2001 - 07/2003: Marie Curie Individual Fellowship - contract nr. HPMF-CT-2000-00895  
(Institut Joseph Fourier, Grenoble, France)

11/2004 - 10/2005: Humboldt Research Fellowship (University of Bayreuth, Germany)

12/2005 - 11/2006: Humboldt Return Fellowship (Institutul de Matematică "Simion Stoilow"  
al Academiei Române)

08/2008 - 09/2008: Visiting Fellowship (Max Planck Institut fuer Mathematik, Bonn,  
Germany)

04/2008 - 05/2008: Visiting Fellowship (Max Planck Institut fuer Mathematik, Bonn,  
Germany)

11/2008 - 12/2008: Visiting Scientist (Institut des Hautes Etudes Scientifiques, Bures-sur-  
Yvette, France)

08/2009 - 08/2009: Resumption of a Humboldt Research Fellowship (Humboldt University  
Berlin, Germany)

02/2010 - 02/2010: Visiting Scholarship, Consiglio Nazionale delle Ricerche (Università  
degli Studi di Genova, Italy)

05/2010 - 05/2010: Visiting Scientist (Institut Henri Poincaré, Paris, France)

07/2010 - 09/2010: Visiting Fellowship (Max Planck Institut fuer Mathematik, Bonn,  
Germany)

04/2011 - 06/2011: Directeur de Recherches Invite, CNRS (Institut Elie Cartan, Nancy,  
France)

11/2011 - 11/2011: Visiting Scientist (Institut des Hautes Etudes Scientifiques, Bures-sur-  
Yvette, France)

07/2012 - 09/2012: Visiting Fellowship (Max Planck Institut fuer Mathematik, Bonn, Germany)

07/2013 - 09/2013: Resumption of a Humboldt Research Fellowship (Humboldt University Berlin, Germany)

09/2013 - 09/2013: Research in Pairs (CIRM Trento, Italy)

07/2014 - 09/2014: Visiting Fellowship (Max Planck Institut fuer Mathematik, Bonn, Germany)

04/2014 - 12/2015: Member of Center for Mathematical Challenges (KAIST – KIAS, South Korea)

07/2016 - 09/2016: Visiting Fellowship (Max Planck Institut fuer Mathematik, Bonn, Germany)

**Prizes** Ad-Astra Prize for Excellence in Research (2016)

”Gheorghe Țițeica” Prize of the Romanian Academy (for 2002)

**Invited conferences** Numerical invariants and stability of 2-vector bundles over ruled surfaces, International Conference on Algebraic Geometry, Commutative Algebra and Computer Algebra, Constanța, Romania, 1996

Vector bundles on Hirzebruch surfaces, VBAC98 Workshop, Durham, Marea Britanie, 1998,  
<http://fourier.dur.ac.uk:8000/~dma0wmo/vbac/durham98.html>

On the vanishing of higher syzygies of curves, EURROMMAT-IMAR Workshop, Bucharest and Pitești, Romania, 2001,  
<http://www.imar.ro/~eurrommat/AGAT.html>

On the vanishing of higher syzygies of curves, VBAC01 Workshop, Roma, Italy, 2001,  
<http://ricerca.mat.uniroma3.it/Conferenze/VBAC2001/>

VBAC02 Workshop, Luminy, France, 2002

Sur l'annulation de la cohomologie de Koszul des courbes algébriques, GAC 2003, Luminy, France, 2003,  
<http://math.univ-angers.fr/%7Eeducrot/GAC/GAC03.html>

Syzygies and geometry of projective curves, 5th Congress of Romanian Mathematicians, Pitesti, Romania, 2003,  
[http://www.imar.ro/organization/activities/standalone/congmatro2011/past\\_events/congmatro](http://www.imar.ro/organization/activities/standalone/congmatro2011/past_events/congmatro)

5.html

On Green and Green-Lazarsfeld conjectures for generic  $d$ -gonal curves, Komplexe Algebraische Geometrie, Oberwolfach, Germany, 2005,  
[http://www.mfo.de/occasion/0507/www\\_view](http://www.mfo.de/occasion/0507/www_view)

Syzygies of  $d$ -gonal curves, Journées de géométrie algébrique, Lille, France, 2005,  
<http://math.univ-lille1.fr/~markushe/journees-2005.htm>

Geometry of Curves and Koszul Cohomology, The 7th International Workshop on Differential Geometry and its Applications, Deva, Romania, September 5-11, 2005,  
[http://math.ubbcluj.ro/~aga\\_team/DiffGeomDeva2006.html](http://math.ubbcluj.ro/~aga_team/DiffGeomDeva2006.html)

Geometry of Curves and Koszul Cohomology, Moduli spaces and Vector bundles, in honor of Prof. P.E. Newstead, CIMAT, Guanajuato, Mexico 2006,  
<http://www.cimat.mx/Eventos/mspacesvbundles/>

Syzygies and geometry of complex curves, 6th Congress of Romanian Mathematicians, Bucharest, Romania, 2007,  
<http://www.imar.ro/~purice/conferences/Cong-6/congmatro07-second-2.html>

Viertes Deutsch-Rumaenisches Seminar ueber Geometrie, Dortmund, Germany, 2007,  
[http://www.imar.ro/%7Epurice/Inst/Dortmund\\_2007.pdf](http://www.imar.ro/%7Epurice/Inst/Dortmund_2007.pdf)

Brill-Noether Theory for Curves on K3 Surfaces, 8th International Workshop on Differential Geometry and its Applications, Cluj-Napoca, Romania, August 17-24, 2007,  
[http://math.ubbcluj.ro/~aga\\_team/DiffGeomCluj2007.pdf](http://math.ubbcluj.ro/~aga_team/DiffGeomCluj2007.pdf)

Koszul cohomology and moduli spaces, IMAR 60 International Conference, Bucharest, Romania, June 25 – 27, 2009,  
<http://www.imar.ro/~purice/Inst/2009/Programme-IMAR60.pdf>

Green's conjecture for curves on K3 surfaces, Algebra and Geometry of Subvarieties of Projective Space, Daejeon, South Korea, January 27-29, 2010,  
[http://asarc.kaist.ac.kr/bbs/view.php?board\\_id=conference&no=24](http://asarc.kaist.ac.kr/bbs/view.php?board_id=conference&no=24)

Green's Conjecture for Curves on K3 Surfaces, After Carnival: An Algebraic Geometry party at Turin, Torino, Italy, 2010,  
<http://www.dm.unito.it/convegniseminari/geometryparty/>

Koszul cohomology and moduli spaces, "Alexandru Myller" Mathematical Seminar Centennial Conference, Iași, Romania, 2010,  
<http://www.math.uaic.ro/~Myller2010/programme.pdf>

Syzygies of curves on K3 surfaces, International Conference & Humboldt Kolleg on Fundamental Structures of Algebra, Constanța, Romania, 2010,  
<http://math.univ-ovidius.ro/conference/70/>

Green's Conjecture for Curves on K3 surfaces, OSU-Michigan-UIC Workshop in Algebraic Geometry, Chicago, USA, 2010,  
<https://sites.google.com/site/fall2010osumichuic/>

Vector bundles and syzygies, BIRS Workshop 12w5117, Syzygies in Algebraic Geometry, with an exploration of a connection with String Theory, Banff, Canada, 2012,  
<http://www.birs.ca/events/2012/5-day-workshops/12w5117>

Equations and syzygies of projective curves, Workshop “Curves and their Jacobians: State of the Art” Bellavista Relax Hotel, Levico Terme (Trento), 2013,  
<http://www.science.unitn.it/cirm/Curves2013.html>

Vector bundles in the geometry of projective varieties, Workshop for young researchers in mathematics, Constanța, Romania, 2013,  
<http://math.univ-ovidius.ro/Workshop/2013/WYRM/Abstracts.pdf>

Chow forms of K3 surfaces and Ulrich bundles, Experimental and theoretical methods in Algebra, Geometry and Topology, Eforie Nord, Romania, 2013,  
<http://math.univ-ovidius.ro/Conference/ETMAGT60/GeneralInfo.htm>

Ulrich bundles on K3 surfaces, Anniversary conference Faculty of Sciences – 150 years, Bucharest, Romania, 2013,  
<http://fmi.unibuc.ro/FMI-150/>

Syzygies and geometry of curves, KAIST CMC School on Algebraic Geometry, Daejeon, Corea de Sud, 2014,  
<http://home.kias.re.kr/MKG/h/KCSAG2014/>

Ulrich bundles on K3 surfaces, K3 surfaces and their moduli, Schiermonnikogge, Olanda, 2014,  
<http://www2.mathematik.hu-berlin.de/~ortega/K3Conf/index.html>

Ulrich bundles on K3 surfaces, Syzygies and moduli of curves, Milano, Italy, 2014,  
<http://www.mat.unimi.it/users/geoalg/Abstracts/2014/workshopSizigie2014.pdf>

Ulrich bundles on K3 surfaces, Positivity, Vanishing theorems and applications, Lille, France, 2014,  
<http://math.univ-lille1.fr/~broustet/positiv2014/>

On polynomial equations and vector bundles, On Form and Pattern, Humboldt Kolleg, Bucharest, Romania, 2014,

<http://www.humboldt-club.infim.ro/docs/Program%20Final.pdf>

Ulrich bundles on K3 surfaces, Classical algebraic geometry, Oberwolfach, Germany, 2014,  
[http://www.mfo.de/occasion/1427/www\\_view](http://www.mfo.de/occasion/1427/www_view)

Cayley-Chow forms of K3 surfaces and Ulrich bundles, Syzygies in Algebra and Geometry, Busan, South Korea, 2015  
<http://mathsci.kaist.ac.kr/~sjkwak/syzygy2015/>

Cayley-Chow forms of K3 surfaces and Ulrich bundles, GTM Seminar, Milano, Italy, 2015  
<https://www.eko.polimi.it/index.php/gtm2015/gtm2015>

Cayley-Chow forms of K3 surfaces and Ulrich bundles, Moduli Spaces in Geometry, CIRM Luminy-Marseille, France, 2015  
<http://www.i2m.univ-amu.fr/~telemann/WorkshopModuli/>

Secant loci and syzygies, Mediterranean Complex Geometry, Carry-le-Rouet, France, 2016  
<https://mcp2016.sciencesconf.org/resource/page/id/1>

Syzygies and secant loci, Positivity and vanishing theorems, Lille, France, 2016  
<http://math.univ-lille1.fr/~laytimi/>

Syzygies and secant loci, Geometrie della varieta algebrica, Levico Terme, Italy, 2016  
<http://ricerca.mat.uniroma3.it/GVA/GVAcongress2016.html>

Ulrich bundles on projective surfaces, Seminaire Mediterranee de Geometrie Algebrique, Univ. Nice, France, 2017,  
<https://smga.sciencesconf.org/>

Syzygies and secant loci, Modern Algebra and Classical Geometry, Trento, Italy, 2017,  
<https://cirm.fbk.eu/events/modern-algebra-and-classical-geometry>

Ulrich bundles on projective surfaces, Commutative Algebra meeting Algebraic Geometry, Universitatea din Bucuresti, Romania, 2017,  
<http://www.unibuc.ro/~conference/dorin-popescu-70/>

Minicourse on syzygies, The 25th National School of Commutative Algebra, Universitatea din Bucuresti, Romania, 2017,  
<http://math.univ-ovidius.ro/sna/edition.aspx?cat=GeneralInfo&itemID=12>

Green's conjecture and vanishing of Koszul modules, North German Algebraic Geometry Seminar (NoGAGS), Humboldt Univ. Berlin, Germany, 2017,  
<http://www2.mathematik.hu-berlin.de/~alggeo-webadmin/events/NoGAGS2017/conference.php>

**Seminars abroad** France: Angers: 2004, 2006; Brest: 2003, 2004; Dijon: 2008; Grenoble: 2000, 2001, 2002, 2003, 2004, 2005, 2011; Lille: 2001, 2003, 2004, 2007; Nantes: 2004, 2006; Nancy: 2006, 2007, 2011; Paris 6 (Jussieu): 2001, 2004, 2008, 2011, 2016; Paris Sud (Orsay): 2004; Strasbourg: 2004, 2005, 2006.

Germany: Bayreuth: 1998, 1999, 2002, 2004, 2005; Berlin: 2008, 2009, 2011, 2012, 2013; Max Planck Institut fuer Mathematik Bonn: 2002, 2008, 2014, 2016; Kaiserslautern: 2002, 2005; Koeln: 2005, 2007; Osnabrueck: 2002; Saarbruecken: 2005.

Italy: Genoa: 2010; Roma 1: 2009; Roma 3: 2005, 2014, 2017; CIRM Trento: 2013; ICTP Trieste: 1999, 2001, 2003, 2004, 2005; Politecnico di Torino: 2017.

South Korea: KAIST Daejeon: 2010, 2014.

USA: University of Illinois, Chicago: 2010.