

ALEXANDRU IOSIF

BORN	14th of May, 1989; Ploiești, România								
EDUCATION	<p>Master in Mathematics High School Education at Universidad Autónoma de Madrid</p> <p>PhD in Mathematics at Otto-von-Guericke-Universität Magdeburg Thesis: <i>Algebraic methods for the study of multistationarity in mass-action networks</i> Advisors: Carsten Conradi (HTW-Berlin) and Thomas Kahle (OvGU-Magdeburg) (Jan 2016 – Feb 2019)</p> <p>Internship at Laboratorio de Óptica de la Universidad de Murcia (Sep – Oct 2015)</p> <p>Master in Mathematics at Universidad Complutense de Madrid (2014 – 2015)</p> <p>Bachelor in Physics at Universidad Complutense de Madrid (2008 – 2014)</p>								
CURRENT POSITION	Mathematics instructor at Rey Juan Carlos University (since Jan 2023)								
TEACHING AT UNIVERSITY	<p>Saint Louis University – Madrid Campus:</p> <table><tr><td>Fall 2021</td><td>Calculus I Advanced Mathematics for Engineers</td></tr><tr><td>Spring 2022</td><td>Calculus I College Algebra (2 courses) Advanced Mathematics for Engineers (1/3 of a group)</td></tr><tr><td>Fall 2022</td><td>Calculus I Precalculus Principles of Mathematics</td></tr></table> <p>Rey Juan Carlos University:</p> <table><tr><td>Spring 2023</td><td>Matemáticas II Ampliación de Matemática Avanzada</td></tr></table>	Fall 2021	Calculus I Advanced Mathematics for Engineers	Spring 2022	Calculus I College Algebra (2 courses) Advanced Mathematics for Engineers (1/3 of a group)	Fall 2022	Calculus I Precalculus Principles of Mathematics	Spring 2023	Matemáticas II Ampliación de Matemática Avanzada
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EMPLOYMENT	<p>Mathematics instructor at Saint Louis University – Madrid Campus (Sep 2021 - Dec 2022)</p> <p>Postdoctoral fellow at the Joint Research Center for Computational Biomedicine, UKA RWTH Aachen University (Mar 2019 - Aug 2020)</p> <p>Research assistant at Otto-von-Guericke-Universität Magdeburg (Sep 2017 – Feb 2019)</p> <p>Research assistant at Hochschule für Technik und Wirtschaft Berlin (Mar 2016 – Aug 2017)</p> <p>Maths & Science Tutoring at Academia Las Rozas (Summers of 2011, 2014 and 2015)</p>								
PUBLICATIONS	<p>D. Grigoriev, A. Iosif, H. Rahkooy, T. Sturm, A. Weber, <i>Efficiently and Effectively Recognizing Toricity of Steady State Varieties</i>, Math. Comput. Sci. (2020)</p> <p>C. Conradi, A. Iosif, T. Kahle, <i>Multistationarity in the space of total concentrations for</i></p>								

systems that admit a monomial parametrization, Bull. Math. Biol. 81 (10): 4174-4209 (2019)

INVITED TALKS

Toric biochemical systems:
INRIA Saclay, Paris, Feb 24, 2020

Sistemas bioquímicos tóricos:
V Congreso de Jóvenes Investigadores – Castelló 2020, Jan 27 – 31, 2020

Dynamical systems with toric positive steady states:
Workshop on Algebraic and Analytical Methods for Dynamical Systems with Applications to Reaction Networks, Aachen, Apr 30, 2019

The computation of discriminants in mass-action networks:
2017 SIAM Conference on Applied Algebraic Geometry, Atlanta, Aug 3, 2017

TALKS

*Euclides, Descartes y Sturm: la búsqueda de las raíces reales de un polinomio.
¿Demasiado anticuados para contarlos en el aula de Secundaria?*
Seminario Didáctica de las Matemáticas, Universidad Autónoma de Madrid, July 15, 2022

The Sturm discriminant of a linear section of a positive toric variety:
Jíbirí Seminar IV, Zaragoza, June 1 – 3, 2022

Dynamical systems with toric positive steady states:
SYMBIONT Project meeting, Paris, Apr 4 – 5, 2019

Mass-action networks with the isolation property:

- First BYMAT Conference, Madrid, May 7 – 9, 2018
- Graduate Student Meeting on Applied Algebra and Combinatorics, Osnabrück Mar 23, 2018

The computation of discriminants in mass-action networks:
Meeting of the European SIAM Chapters 2017, Prague, Aug 29, 2017

Astronomía de posición:
Curso de Introducción a la Astronomía, ASAAF UCM, Madrid (2009 and 2011)

EXPERIENCE

Visting the Department of Specific Didactics at Autonoma University of Madrid
May – July 2022

Supervisor of an undergradutate student within the Programm DAAD RISE Germany
OvGU Magdeburg, May–Aug 2018

Fellows representative in the Management Board of the DFG-RTG “MathCore”
OvGU Magdeburg, Sep 2017 – Sep 2018

Co-organizer of the *Reading group in syzygies*
OvGU Magdeburg & MPI MIS Leipzig, Oct 2017 – Feb 2018

Co-organizer of the *Reading group in coding theory*
OvGU Magdeburg, May – June, 2017

Secretary of the Astronomy Club ASAAF
ASSAF UCM, Universidad Complutense de Madrid, 2008

CODE	https://bitbucket.org/alexandru-iosif/
CONFERENCES	<p>Congreso Internacional "Ceci n'est pas une école: Educación, digitalización y pandemia" Madrid, June 10 – 11, 2021</p> <p>V Congreso de Jóvenes Investigadores Castelló, Jan 27 – 31, 2020</p> <p>SIAM Conference on Applied Algebraic Geometry Bern, July 9 – 13, 2019</p> <p>MEGA+MEGAR 2019 Madrid, June 17 – 22, 2019</p> <p>Macaulay2 Workshop 2018 Leipzig, June 4 – 8, 2018</p> <p>Workshop "Numerical methods for algebraic curves" Rennes, Feb 19 – 23, 2018</p> <p>Open Source Computer Algebra Research (OSCAR) Leipzig, Dec 11 – 12, 2017</p> <p>Algebra meets Numerics: Condition and Complexity Berlin, Nov 6 – 7, 2017</p> <p>SIAM Conference on Applied Algebraic Geometry Atlanta, July 31 – Aug 4, 2017</p> <p>Applied Macaulay2 tutorials Atlanta, July 27 – 29, 2017</p> <p>Foundations of Computational Mathematics Barcelona, 10 – 19 July, 2017</p> <p>Reading Group on Real Algebraic Geometry Leipzig, July 3 – 7, 2017</p> <p>Interactions between algebra and the sciences Leipzig, May 27, 2017</p> <p>Summer School on Multigraded Algebra and Applications Moieciu, Aug 17 – 24, 2016</p> <p>Summer School on Algebra, Statistics and Combinatorics Helsinki, June 27 – July 2, 2016</p> <p>Multiple Zeta Values, Multiple Polylogarithms and Quantum Field Theory Madrid, 7 – 11 Oct de 2013</p> <p>Quantum theory's influences on topology, analysis and geometry Copenhagen, May 20 – June 1, 2013</p>

Lorentzian Homogeneous Spaces
7 – 8 Mar, 2013

Recent Progress in Real Complexity and Computation
16 – 20 July, 2012

ONLINE
EDUCATION

The Ancient Greeks
Coursera, Wesleyan University, 2016

Pintura Europea: Leonardo, Rembrandt, Goya
edX, UC3MX, 2015

El enlace químico y las interacciones moleculares
edX, UPValenciaX, 2015

LANGUAGES

Romanian (native), Spanish (fluent), English (C1),
French (basic), Portuguese (basic), German (basic)

TECHNICAL
SKILLS

Emacs, Latex, M2, Maple, Mathematica, Python, Online teaching