

Christos K. Tatakis

SHORT CURRICULUM VITAE

1st km Loutra-Haramida, P.O.Box 13
Mitilini-Lesvos P.C. 81150, Greece
✉ www.chtatakis-mathnet.gr
Last update: 01/11/2023

Personal information

Birthdate: 26/01/1983, Mitilini (Lesvos)

Webpage: www.chtatakis-mathnet.gr

Education

2011 **Doctor of Philosophy in Pure Mathematics**, University of Ioannina, School of Sciences, Department of Mathematics, Ioannina-Greece.

Title: Toric ideals in Combinatorial and Commutative Algebra, 83 pp.

Supervisor: Professor Apostolos Thoma

2007 **Master of Science in Pure Mathematics**, University of Ioannina, School of Sciences, Department of Mathematics, Ioannina-Greece.

Supervisor: Professor Apostolos Thoma

2005 **Bachelor of Science in Mathematics**, University of Ioannina, School of Sciences, Department of Mathematics, Ioannina-Greece.

Fields of research

- Combinatorial Commutative Algebra
- Algebraic Graph Theory
- Algebraic Combinatorics
- Algebraic Statistics
- Symbolic Computation

Academic positions

2022-2024 **Postdoctoral researcher**, Aristotle University of Thessaloniki, Department of Mathematics, Supervisor: Professor Hara Charalambous.

2022-2023 **Visiting Lecturer**, (*Spring Semester*), University of the Aegean, Department of Mathematics.

- Group Theory (3rd year course)
- Classical Mechanics (3rd year course)

- 2015-2022 **Visiting Lecturer**, University of Ioannina, Department of Mathematics.
- Linear Algebra I (1st year course)
 - Linear Algebra II (1st year course)
 - Analytic Geometry (1st year course)
 - Calculus I (1st year course in Department of Chemistry)
 - Calculus II and Differential Equations (1st year course in Department of Chemistry)
 - Gröbner bases (3rd year course)
 - Transformation Geometry (3rd year course)
 - Algebraic curves (3rd year course)
 - Rings, Modules and Applications (3rd year course)
 - Topics in Algebra: Module theory (4th year course)
 - Euclidean Geometry and non Euclidean Geometries (4th year course)
 - Topics in Algebra: Advanced Commutative Algebra (4th year course)
- 2017-2018 **Visiting Lecturer**, (*Fall Semester*), Aristotle University of Thessaloniki, Department of Mathematics.
- Computational methods in Algebra and Algebraic Geometry (3rd year course)
- 2014-2015 **Visiting Lecturer**, University of the Aegean, Department of Mathematics.
- An introduction in Life Insurance Mathematics (1st year course)
- 2012-2013 **Visiting Lecturer**, Technological Educational Institute of Patras, Department of Informatics (Spring Semester).
- Probabilities and Statistics (2nd year course)
- Visiting Lecturer**, Technological Educational Institute of Kalamata, Department of Food Technology (Spring Semester).
- Calculus and Differential equations (1st year course)
- Visiting Lecturer**, Technological Educational Institute of Messolonghi, Department of Automation. (*Fall Semester*).
- Probabilities and Statistics (2nd year course)
 - Laboratory/SPSS Statistic Program (2nd year course)
- 2005-2011 **Teaching Assistant**, University of Ioannina, Department of Mathematics (Tutorials).
- Linear Algebra I (1st year course)
 - Linear Algebra II (1st year course)
 - Number Theory (2nd year course)
 - Algebraic Structures (3rd year course)
 - Gröbner bases (Graduate course)

Publications

- Publ.1 I.Garcia-Marco, P.A. Garcia-Sanchez, I. Ojeda, Ch. Tatakis, Universally free numerical semigroups, *Journal of Pure and Applied Algebra* 228 (5), 107551, (2024).
- Publ.2 Ch.Tatakis, A.Thoma, M.Vladoiu, The Markov complexity of book graphs, *Linear Algebra and its Applications* 661, 51-78, (2023).
- Publ.3 I.Garcia-Marco, Ch.Tatakis, On robustness and related properties on toric ideals, *Journal of Algebraic Combinatorics* 57 (1), 21-52, (2023).
- Publ.4 Ch.Tatakis, A.Thoma, On the relative size of toric bases, *Journal of Algebra Appl.* 21 (4), 2250079, (2022).

- Publ.5 Y.Stamatiou, Ch.Tatakis, An algorithm for computing the universal Gröbner basis of graph ideals, Int. Journal of Computer Mathematics CST 4 (2), 67-75, (2019).
- Publ.6 Ch.Tatakis, Generalized robust toric ideals, Journal of Pure and Applied Algebra 220 (1), 263-277, (2016).
- Publ.7 Ch.Tatakis, A.Thoma, Graver degrees are not polynomially bounded by true circuit degrees, Journal of Pure and Applied Algebra 219, 2658-2665, (2015).
- Publ.8 Ch.Tatakis, A.Thoma, On complete intersection toric ideals of graphs, Journal of Algebraic Combinatorics 38 (2), 351-370, (2013).
- Publ.9 E.Reyes, Ch.Tatakis, A.Thoma, Minimal generators of toric ideals of graphs, Advances in Applied Mathematics 48 (1), 64-78, (2012).
- Publ.10 Ch.Tatakis, A.Thoma, On the universal Gröbner basis of toric ideals of graphs, Journal of Combinatorial Theory Series A 118, 1540-1548, (2011).

Academic notes/Monographs

- Ch.Tatakis, A.Thoma, Notes in Gröbner bases (in Greek), 128 pp. in preparation, 12/2020. Available online: <http://chtatakis-mathnet.gr/index.php/el/didaskalia/23-simeioseis/99-grobnerbasis>
- Ch.Tatakis, Toric Ideals and Graph Theory in Combinatorics and Commutative Algebra, Ph.D. Thesis (in Greek), University of Ioannina, School of Sciences, Department of Mathematics, (82 pages) 2011.

Professional service

Referee

Referee for the following international journals:

- Journal of Algebra
- Journal of Algebraic Combinatorics
- Annals of Combinatorics
- SIAM Journal of Discrete Mathematics
- Contemporary Mathematics

Reviewer for books

- 2019 F.W.Moore, M.Rogers, S.Sather-Wagstaff, Monomial ideals and their decompositions. Universitext. Springer 2018. (reviewer for EMS - Zentralblatt Math)
- 2017 V. Buchstaber, T. Panov, Toric topology, Mathematics Surveys and Monographs Vol. 204, AMS. (reviewer for EMS - Zentralblatt Math)

Reviewer for international journals

- 2016-present Reviewer for AMS - Math. Reviews (MathScinet)
- 2013-present Reviewer for EMS - Zentralblatt MATH