CURRICULUM VITAE
July 2026

Name: Konstantin Athanassopoulos.
Date and place of birth: 05. March 1961 in Athens, Greece.
Address: Department of Mathematics, University of Crete, GR-71409 Iraklion.
e-mail: athanako@math.uoc.gr
Homepage: http://www.math.uoc.gr/∼athanako

1. Studies and positions

1978-83: Student in the Department of Mathematics of the University of Athens.
1984-86: Fellow of the National Fellowship Foundation of Greece to carry out Ph.D. Thesis in the Department of Mathematics of the University of Athens under the supervision of Prof. Polychronis Strantzalos. Title of the Thesis: "Contribution to the theory of D^+-stable dynamical systems on 2-manifolds", University of Athens, 1986 (in Greek).
1987-88: Military service.
1988-90: Research Fellow of the Humboldt Foundation to carry out research in the Mathematical Institute of the Freie Universität Berlin. Host Prof. Dr. Elmar Vogt.
1991-93: Visitor in the Department of Mathematics of the University of Crete.
1993-97: Lecturer in the Department of Mathematics of the University of Crete.
1997-2002: Assistant Professor in the Department of Mathematics of the University of Crete.
2002-2010: Associate Professor in the Department of Mathematics of the University of Crete.
2011-today: Professor in the Department of Mathematics of the University of Crete.

2. Research interests

The general research interests are in the areas of Dynamical Systems, Ergodic Theory, Differential Topology and Geometry, as well as interactions between them. Part of the previous work has focused on the study of various notions of rotation numbers.

One subject of recent research is the study of the structure of a flow in the region of attraction of an isolated invariant set and in particular of an isolated unstable attractor. Another issue is the analytical study of C^1 vector fields on orientable 2-manifolds using their infinitesimal symmetries. Related to this is the problem of the behaviour of the derivative of a Denjoy C^1 diffeomorphism of the circle on its Cantor minimal set in connection with McDuff's question.

3. Fellowships and grants

1984: Two years fellowship from the National Fellowship Foundation of Greece IKY.
1988: Eightteen months research fellowship from the Humboldt Foundation.
1997: Two months research fellowship from the DAAD.
1997: One month financial support from the Sonderforschungsbereich Diskrete Strukturen in der Mathematik of the University of Bielefeld.
2003: One month financial support from the DFG Forschergruppe Spektrale Analysis und Stochastische Dynamik (Teilprojekt : Dynamik und Geometrie linearer algebraischer Gruppen) of the University of Bielefeld.

4. Publications

1. D^+-stable dynamical systems on 2-manifolds, *Math. Z.* 196 (1987), 453-462.
2. (with P. Strantzalos) On minimal sets in 2-manifolds, *J. reine angew. Math.* 388 (1988), 206-211.
3. The flow near nontrivial minimal sets on 2-manifolds, *Math. Proc. Camb. Phil. Soc.* 108 (1990), 569-573.
4. Cohomology and asymptotic stability of 1-dimensional continua, *Manuscripta Math.* 72 (1991), 415-423.
5. A characterization of Denjoy flows, *Bull. London Math. Soc.* 24 (1992), 83-86.
6. Some aspects of the theory of asymptotic cycles, *Expositiones Math.* 13 (1995), 321-336.
7. (with A. Manoussos) Minimal flows on multipunctured surfaces of infinite type, *Bull. London Math. Soc.* 27 (1995), 595-598.
8. One-dimensional chain recurrent sets of flows in the 2-sphere, *Math. Z.* 223 (1996), 643-649.
9. Flows with cyclic winding numbers groups, *J. reine angew. Math.* 481 (1996), 207-215.
10. (with Th. Petrescou and P. Strantzalos) A class of flows on 2-manifolds with simple recurrence, *Comment. Math. Helvetici* 72 (1997), 618-635.
11. Rotation numbers and isometries, *Geom. Dedicata* 72 (1998), 1-13.
12. Volume preserving flows with cyclic winding numbers groups and without periodic orbits on 3-manifolds, *Manuscripta Math.* 97 (1998), 37-44.
13. Periodicity criteria of Poincaré-Bendixson type, *Univ. Iagel. Acta Math.* 36 (1998), 181-182.
14. Rotation of orbits and isometries, *Proceedings of the 3d Panhellenic Conference of Geometry*, (1999), 67-71.
15. (with A. Alexellis) Chain recurrence in flows on the Klein bottle, *Math. Proc. Camb. Phil. Soc.* 127 (1999), 83-91.
16. Cohomology of surface minimal sets, *Expositiones Math.* 17 (1999), 371-374.
17. On the Ruelle rotation for torus diffeomorphisms, *Math. Z.* 234 (2000), 225-239.
18. Explosions near isolated unstable attractors, *Pacific J. Math.* 210 (2003), 201-214.
19. Remarks on the region of attraction of an isolated invariant set, *Colloq. Math.* 104 (2006), 157-167.
20. Pointwise recurrent homeomorphisms with stable fixed points, *Topology Appl.* 153 (2006), 1192-1201.

21. Divergence of C^1 vector fields and nontrivial minimal sets on 2-manifolds, *Journal of Differential Equations* 243 (2007), 24-35.

22. Asymptotically stable one-dimensional compact minimal sets, *Topol. Methods Nonlinear Anal.* 30 (2007), 397-406.

23. (with C. Panagiotakis and G. Tziritas) The equipartition of curves, *Computational Geom.* 42 (2009), 677-689.

24. The Ruelle rotation of Killing vector fields, *Colloq. Math.* 116 (2009), 243-247.

25. Denjoy C^1 diffeomorphisms of the circle and McDuff's question, *Expositiones Math.* 33 (2015), 48-66.

26. Coherent measures and the unstable manifold of isolated unstable attractors, *Dynamical Systems* 34 (2019), 434-442.

27. A sufficient condition for the logarithm of the derivative of a Denjoy C^1 diffeomorphism to be a measurable coboundary, preprint.

28. On the existence of absolutely continuous conformal measures, preprint.

5. Teaching experience

Courses given in the University of Crete:
1990-91: (i) Vector Analysis and Differential Equations.
1991-92: (i) Optimization Theory, (ii) Calculus II.
1992-93: (i) Analysis of functions of several variables, (ii) Vector Analysis and Differential Equations.
1993-94: (i) Topology, (ii) Dynamical Systems.
1994-95: (i) Calculus II, (ii) Algebraic Topology-Homology Theory (graduate course).
1995-96: (i) Differential Geometry, (ii) Group Theory.
1996-97: (i) Topology, (ii) Differentiable Manifolds (graduate course).
1997-98: (i) On leave, (ii) Analysis of functions of several variables.
1998-99: (i) Algebraic Topology, (ii) Chaos and Dynamical Systems, (iii) Riemannian Geometry (graduate course).
1999-2000: (i) Algebra, (ii) Hyperbolic Geometry, (iii) Differentiable Manifolds (graduate course).
2000-01: (i) Algebraic Topology-Homotopy Theory (graduate course), (ii) Calculus II, (iii) Group Theory (with A. Kouvidakis).
2001-02: (i) Differential Geometry, (ii) Differentiable Manifolds (graduate course).
2002-03: (i) Calculus II, (ii) Differential Geometry (with D. Kalikakis), (iii) Riemannian Geometry (graduate course).
2003-04: (i) Topology, (ii) Calculus III, (iii) Differentiable Manifolds (graduate course).
2004-05: (i) Algebra, (ii) Topology, (iii) Riemannian Geometry (graduate course).
2005-06: (i) Differential Geometry, (ii) Calculus II, (iii) Differentiable Manifolds (graduate course).
2006-07: (i) Topology, (ii) Differential Geometry, (iii) Riemannian Geometry (graduate course).
2007-08: (i) Differential Geometry, (ii) Calculus III, (iii) Calculus II.

2008-09: (i) Riemannian Geometry (graduate course), (ii) Analysis of functions of several variables, (iii) Linear Algebra, (iv) Characteristic Classes (graduate course).
2009-10: (i) Differential Geometry, (ii) Algebraic Topology-Homotopy Theory (graduate course), (iii) Linear Algebra II, (iv) Geometry, (v) Algebraic Topology-Homology Theory (graduate course).
2010-2011: (i) Linear Algebra, (ii) Algebraic Topology-Homotopy Theory (graduate course), (iii) Complex Manifolds (with A. Kouvidakis, graduate course), (iv) Analysis of functions of several variables.
2011-2012: (i) Linear Algebra, (ii) Differential Geometry, (iii) Characteristic Classes (graduate course), (iv) Chaos and Dynamical Systems.
2012-2013: (i) Linear Algebra, (ii) Algebraic Topology-Homology Theory (graduate course), (iii) Geometry.
2013-2014: (i) Linear Algebra, (ii) Calculus II, (iii) Analysis of functions of several variables.
2014-2015: (i) Linear Algebra, (ii) Algebraic Topology-Homology Theory (graduate course), (iii) Calculus II.
2015-2016: (i) Linear Algebra, (ii) Riemannian Geometry (graduate course), (iii) Calculus II.
2016-2017: (i) Linear Algebra II, (ii) Morse Homology (graduate course), (iii) Calculus II, (iv) Riemannian Geometry (graduate course).
2017-2018: (i) Analysis I, (ii) Differential Geometry, (iii) Riemannian Geometry (graduate course).
2018-2019: (i) Differential Geometry, (ii) Topology, (iii) Mathematics II.
2019-2020: (i) Differential Geometry, (ii) Topology, (iii) Analysis of functions of several variables.
2020-2021: (i) Differential Geometry, (ii) Topology, (iii) Topics in Analysis (Chaos and Dynamical Systems).
2021-2022: (i) Geometry, (ii) Analysis of functions of several variables, (iii) Functional Analysis.
2022-2023: (i) Geometry, (ii) Analysis I, (iii) Topics in Analysis (Chaos and Dynamical Systems).
2023-2024: (i) Analysis of functions of several variables, (ii) Differential Geometry, (iii) Theory of Sets.
2024-2025: (a) Topology, (b) Riemannian Geometry (graduate course), (c) Geometry, (iv) Algebraic Topology-Homotopy theory (graduate course).
2025-2026: (a) Geometry, (b) Theory of Manifolds (graduate gourse), (c) Differential Geometry.

Seminars organized in the Department of Mathematics of the University of Crete:
1993: Topology of foliations.
1994: Ergodic Theory (in collaboration with D. Gatzouras).
2001: Ergodic Theory from a geometric point of view (with E. Menioudaki).
2002: (i) Topological transformation groups, (ii) Dynamics of plane homeomorphisms.
2003: Seminar on Geometry and Algebra.
2004: Seminar on Dynamical Systems.
2005: Seminar on Dynamical Systems and Ergodic Theory.
2006: Symplectic Geometry.

2007: Isolated invariant sets and the Conley index.
2013: Classical Mechanics and Symplectic Geometry.
2024: Symplectic Geometry.
2026: Differential Geometry on principal bundles and Gauge Theory.

Seminars organized within the research group of Prof. P. Strantzalos:
1984: Dynamical Systems on 2-dimensional manifolds.
1985: Geometry of foliations.
1991: Integration Theory and Algebraic Topology.
1996: Dynamics of geodesic and horocycle flows.
1997: Probabilistic and topological entropy of dynamical systems.
1999: Nielsen-Thurston theory for automorphisms of surfaces.
2000: The Casson invariant for homology 3-spheres.

6. Notes of courses and seminars

1. Integration Theory and Algebraic Topology, 1990 (in Greek).
2. Introduction to Optimization Theory, 1991 (in Greek).
3. Handwritten notes on the Analysis of Functions of Several Variables, 1992 (in Greek), http://www.math.uoc.gr/∼athanako.
4. The Conley index for continuous Dynamical Systems, 1993 (in Greek).
5. Differential Equations and Dynamical Systems, 1994 (in Greek).
6. (with D. Gatzouras) Ergodic Theory, 1994 (in Greek).
7. Notes on elementary Topology, 2001 (in Greek), http://www.math.uoc.gr/∼athanako.
8. Notes on the Ergodic Theory of Dynamical Systems from a geometric point of view, 2001, http://www.math.uoc.gr/∼athanako.
9. An introduction to discrete dynamical systems, Lecture notes, 2012 (in Greek), http://www.math.uoc.gr/∼athanako.
10. Symplectic Geometry, 2015, http://www.math.uoc.gr/∼athanako.
11. Sub-Riemannian geodesics and volume, 2019, http://www.math.uoc.gr/∼athanako.
12. Lecture notes of the undergraduate course Differential Geometry of curves and surfaces, 2020 (in Greek), http://www.math.uoc.gr/∼athanako.
13. An introduction to smooth manifolds, de Rham cohomology and characteristic classes, 2020, http://www.math.uoc.gr/∼athanako.
14. Euclidean and Non-Euclidean Geometry, undergraduate lecture notes, 2021 (in Greek), http://www.math.uoc.gr/∼athanako.
15. An introduction to Riemannian Geometry (2022),http://www.math.uoc.gr/∼athanako.

7. Supervision of graduate students

Supervision of the Master Thesis of Mr. John Platis entitled "On the Godbillon-Vey invariant : Continuous variation and leaf dynamics" written in the Department of Mathematics of the University of Crete, Iraklion 1994.

Supervision of the Master Thesis of Mrs. Elen Menioudaki entitled "Dynamical Systems without periodic orbits : Counterexamples to Seifert's conjecture" written in the Department of Mathematics of the University of Crete, Iraklion 2000.

Supervision of the Master Thesis of Mr. J. Tsekouras entitled "Topological characterization of the conformal automorphisms of the 2-sphere : A modern approach", written in the Department of Mathematics of the University of Crete, Iraklion 2002.

Supervision with A. Kouvidakis of the Master Thesis of Mr. G. Kydonakis entitled "The space of holomorphic vector bundles on a Riemann surface", written in the Department of Mathematics of the University of Crete, Iraklion 2011.

Supervision of the Master Thesis of Mr. Ch. Mpougas entitled "Blaschke's conjecture and wiedersehen manifolds", written in the Department of Mathematics of the University of Crete, Iraklion 2014.

Supervision of the Master Thesis of Mr. V. Aimoniotis entitled "Topological Complexity", written in the Department of Mathematics of the University of Crete, Iraklion 2014.

Supervision of the Master Thesis of Mr. G. Vlachakis entitled "Integrability of Hamiltonian systems by Thimm's method", written in the Department of Mathematics and Applied Mathematics of the University of Crete, 2025.

Guidance of the mathematical part of the Ph. D. Thesis of Mr. A. Alexellis entitled "One-dimensional chain recurrent sets of flows on the Klein bottle", written in the Department of Mathematics of the University of Athens, Athens 2004. The historical part and the educational part were supervised by Prof. P. Strantzalos.

8. Selected lectures

"Stable compact minimal sets on 2-manifolds", 7th Congress of Balkan Mathematicians, Athens 1983.
"Topological properties of dynamical systems", 2nd Summer School on non-linear Dynamical Systems, Samos 1988.
"Non-trivial minimal sets on 2-manifolds" invited in the Department of Mathematics of the University of Crete, Iraklion 1990.
"Flows in 1-dimensional spaces", 2nd Congress of Non-Linear Dynamics, Xanthi 1994.
"A survey on chain recurrence and the gradient structure of flows", 2nd Congress of Non-Linear Dynamics, Xanthi 1994.
"Periodicity criteria", 2nd Congress of Geometry, Anogia 1995.
"Periodicity criteria of Poincaré-Bendixson type", Topological Methods in Differential Equations and Dynamical Systems, the International Conference organised on the occasion of the 100th anniversary of the birth of T. Wazewski, Krakow 1996.
"Asymptotic winding and the existence of periodic orbits in continuous flows", 5th Congress of Analysis, Anogia 1996.
"Rotation of orbits and isometric systems", 3d Congress of Geometry, Athens, 1997.
"Rotation numbers and isometries", Arbeitsgemeinschaft Arithmetische Gruppen, Fakultät für Mathematik, Universität Bielefeld, 1997.
"The Ruelle rotation number for diffeomorphisms of the 2-torus", 4th Congress of Geometry, Patras, 1999.
"Rotation numbers in dynamical systems", invited in the Department of Mathematics of the University of the Aegean, Samos 2001.
"Poincaré-Bendixson Theory", series of three lectures in the Summer School of Mathematics, Iraklion 2002.
"Fixed points of pointwise recurrent homeomorphisms of the 2-sphere", invited in the semi-annual Seminar Sophus Lie, Universität Bielefeld 2003.
"Pointwise recurrent homeomorphisms of S^2", Miniworkshop on Algebraic Groups, Transformation Groups and Related Topics, Fakultät für Mathematik, Universität Bielefeld 2003.

"Pointwise recurrent homeomorphisms of S^2", invited in the Department of Mathematics and Statistics of the University of Cyprus, Nicosia 2005.
"Rotation numbers in Dynamical Systems and Riemannian Geometry", invited in the Department of Mathematics and Statistics of the University of Cyprus, Nicosia 2005.
"Pointwise recurrent homeomorphisms of the sphere", 7th Congress of Geometry, Samos 2005.
"Isolated invariant sets and ANR topologies", 2006 International Conference on Topology and its Applications, Aegion 2006.
"Stable and unstable attractors", in the Department of Mathematics of the University of Athens, Athens 2006.
"Divergence of C^1 vector fields and nontrivial minimal sets on 2-manifolds", 8th Congress of Geometry, Ioannina 2007.
"Stable and unstable minimal attractors", Lyapunov Memorial Conference 2007, International Conference on the occasion of the 150th birthday of A.M. Lyapunov, Kharkiv, Ukraine 2007.
"An algorithm for the equipartition of curves", 9th Congress of Geometry, Anogia 2009.
"Stable and unstable attractors", 10th Congress of Geometry, Patras 2011.
"Stable and unstable attractors", Contemporary Algebra and Geometry in Greece, Department of Mathematics of the University of Athens, Athens 2012.
"The Bendixson-Dulac criterion for minimal sets on surfaces and the cohomological equation", in the Department of Mathematics of the University of Patras, Patras 2012.

9. Conferences

7th Congress of Balkan Mathematicians, Athens, 1983.
Singular behavior and non-linear dynamics, an international conference, organised by St. Pnevmatikos, A. Bountis and Sp. Pnevmatikos, Samos, 1988.
2nd Panhellenic conference on non-linear dynamics, Xanthi, 1994.
Actions of Lie groups and discrete subgroups on manifolds, Euroconference in Mathematics on Crete, organised by G. Margulis and R. Zimmer, Anogia, 1995.
Workshop on Dynamical Systems, organised by J. Palis, Ya. Sinai and J-C. Yoccoz, International Centre for Theoretical Physics, Trieste, 1995.
2nd Panhellenic Congress of Geometry, Anogia, 1995.
Topological Methods in Differential Equations and Dynamical Systems, the International Conference organised on the occasion of the 100th anniversary of the birth of T. Wazewski, Krakow, 1996.
5th Panhellenic Congress of Analysis, Anogia, 1996.
3d Panhellenic Congress of Geometry, Athens, 1997.
4th Panhellenic Congress of Geometry, Patras, 1999.
Holomorphic Dynamics, Euroconference in Mathematics on Crete organised by K. Athanassopoulos, S. Bullett, A. Douady and W. Harvey, Anogia, 1999.
School and Workshop on Dynamical Systems, organised by J. Palis, Ya. Sinai, M. Viana and J-C. Yoccoz, International Centre for Theoretical Physics, Trieste, 2001.
Semi-annual Seminar Sophus Lie, organised by D. Poguntke, Universität Bielefeld, 2003.
7th Panhellenic Congress of Geometry, Samos, 2005.
2006 International Conference on Topology and its Applications, Aegion 2006.
8th Panhellenic Congress of Geometry, Ioannina 2007.

Lyapunov Memorial Conference 2007, International Conference on the occasion of the 150th birthday of A.M. Lyapunov, Kharkov, Ukraine 2007.
9th Panhellenic Congress of Geometry, Anogia 2009.
10th Panhellenic Congress of Geometry, Patras 2011.
Contemporary Algebra and Geometry in Greece, Athens 2012.
11th Panhellenic Congress of Geometry, Athens 2013.
2014 International Conference on Topology and its Applications, Nafpaktos 2014.

10. Other information

Administrative service in the Department of Mathematics of the University of Crete: Director of the Division Geometry and Algebra (2003-2004, 2009-2010, 2011-2012), member of the commitee for graduate studies (1994-1999), member of the commitee for the library (1998-2004), member of the evaluation commitee for visiting positions (1993-1997 and 2006-2010), member of the Research Committee of the University of Crete (2010-2013).

Co-organizer of the 2nd Panhellenic Conference of Geometry, 1995.

Co-organizer of the Euroconference Holomorphic Dynamics, 1999.

Co-organizer of the 9th Panhellenic Conference of Geometry, 2009.

Referee for the journals: Archiv der Mathematik (Basel), Fundamenta Mathematicae, American Mathematical Monthly, Topology and its Applications, Scholarpedia (electronic), Proceedings of the American Mathematical Society, Dynamical Systems, Revista Matematica Iberoamericana, Bulletin of the London Mathematical Society, Proceedings of the Royal Society of Edindurgh.

Reviewer of the "Mathematical Reviews" since 1989, member of the American Mathematical Society (1990-2002) and the Greek Mathematical Society since 1978.

Languages: English, German, Greek.