

# CURRICULUM VITAE

THEODOROS VLACHOS

## Personal data

Date of birth: June 2, 1964.

Place of birth: Arta, Greece.

Citizenship: Greek.

Marital status: Married, with two children.

## Office Address

Department of Mathematics

University of Ioannina

45110 Ioannina, Greece

e-mail: tvlachos@uoi.gr, tvlachos@impa.br

## Research Interests

Differential Geometry, Geometry of Submanifolds.

## Education

- BSc in Mathematics (1982-1986), Department of Mathematics, University of Ioannina, Greece
- PhD in Mathematics (1989-1992), Department of Mathematics, University of Ioannina, Greece (Advisor: Prof. Thomas Hasanis)

## Positions-Research grants and visits

- Visiting Lecturer (1993-1994), Department of Mathematics, University of Crete, Greece
- Visiting Assistant Professor (1994-1995), Department of Mathematics, University of Crete, Greece
- Lecturer (1995-1999), Department of Mathematics, University of Ioannina, Greece
- Alexander von Humboldt Research Fellow (February 1997-July 1997), Technische Universität Berlin, Germany

- Assistant Professor (1999-2004), Department of Mathematics, University of Ioannina, Greece
- Alexander von Humboldt Research Fellow (September 2001-July 2002), Universität Augsburg, Institut für Mathematik, Germany
- Associate Professor (2004-2015), Department of Mathematics, University of Ioannina, Greece
- Alexander von Humboldt Research Fellow (February 2011-April 2011), Universität Augsburg, Institut für Mathematik, Germany
- Visiting position (July 2010, June-July 2011), IMPA Rio de Janeiro, Brasil
- Short visit (November 2012), King's College London, Department of Mathematics, UK
- Short visit (July 2013, August 2013), Leibniz Universität Hannover, Fakultät für Mathematik & Physik , Germany
- Short visit (September 2010, September 2012, February 2013, July-August 2013), Departamento de Matematicas, Universidad de Murcia, Spain
- Special Visiting Researcher scholarship, Science without borders: The Brazilian scientific mobility program at CNPq/MCT, Process number: 300976/2014-3 (February-April 2014), IMPA Rio de Janeiro, Brasil
- Alexander von Humboldt Research Fellow (May-July 2014), Universität Augsburg, Institut für Mathematik, Germany
- Special Visiting Researcher scholarship, Science without borders: The Brazilian scientific mobility program at CNPq/MCT, Process number: 300976/2014-3 (March-April 2015, June-August 2015), IMPA Rio de Janeiro, Brasil
- Special Visiting Researcher scholarship, Science without borders: The Brazilian scientific mobility program at CNPq/MCT, Process number: 300976/2014-3 (March-April 2015, June-August 2016), IMPA Rio de Janeiro, Brasil
- Visiting position (July 2-August 5, 2017), IMPA Rio de Janeiro, Brasil

### Current position

- Full Professor (2015), Department of Mathematics, University of Ioannina, Greece

### Publications

1. Hasanis, Th. and Vlachos, Th.: A local classification of 2-type surfaces in  $\mathbb{S}^3$ . *Proc. Amer. Math. Soc.* **112** (1991), 533-538.
2. Hasanis, Th. and Vlachos, Th.: Coordinate finite-type submanifolds. *Geom. Dedicata* **37** (1991), 155-165.
3. Hasanis, Th. and Vlachos, Th.: Spherical 2-type hypersurfaces. *J. Geom.* **40** (1991), 82-94.
4. Hasanis, Th. and Vlachos, Th.: Hypersurfaces of  $\mathbb{E}^{n+1}$  satisfying  $\Delta x = Ax + B$ . *J. Austral. Math. Soc. (Series A)* **53** (1992), 377-384.
5. Hasanis, Th. and Vlachos, Th.: Surfaces of finite type with constant mean curvature. *Kodai Math. J.* **16** (1993), 244-252.
6. Hasanis, Th. and Vlachos, Th.: A classification of ruled surfaces of finite type in  $\mathbb{S}^3$ . *J. Geom.* **50** (1994), 84-94.
7. Hasanis, Th. and Vlachos, Th.: Quadric representation and Clifford minimal hypersurfaces. *Bull. Belg. Math. Soc.* **1** (1994), 559-568.
8. Hasanis, Th. and Vlachos, Th.: Hypersurfaces in  $\mathbb{E}^4$  with harmonic mean curvature vector field. *Math. Nachr.* **172** (1995), 145-169.
9. Hasanis, Th. and Vlachos, Th.: Hypersurfaces with constant scalar curvature and constant mean curvature. *Ann. Global Anal. Geom.* **13** (1995), 69-77.
10. Vlachos, Th.: An integral formula for hypersurfaces in space forms. *Glasgow Math. J.* **37** (1995), 337-341.
11. Hasanis, Th. and Vlachos, Th.: 2-type surfaces in a hypersphere. *Kodai Math. J.* **19** (1996), 26-38.
12. Vlachos, Th.: Complete submanifolds with parallel mean curvature in a sphere. *Glasgow Math. J.* **38** (1996), 343-346.

13. Hasanis, Th. and Vlachos, Th.: Spherical 2-type surfaces. *Arch. Math. (Basel)* **67** (1996), 430-440.
14. Vlachos, Th.: A characterization for geodesic spheres in space forms. *Geom. Dedicata* **68** (1997), 73-78.
15. Vlachos, Th.: Minimal surfaces in a sphere and the Ricci condition. *Ann. Global Anal. Geom.* **17** (1999), 129-150.
16. Vlachos, Th.: The third fundamental form of minimal surfaces in a sphere. *Arch. Math. (Basel)* **74** (2000), 66-74.
17. Hasanis, Th. and Vlachos, Th.: A pinching theorem for minimal hypersurfaces in a sphere. *Arch. Math. (Basel)* **75** (2000), 469-471.
18. Hasanis, Th. and Vlachos, Th.: Ricci curvature and minimal submanifolds. *Pacific J. Math.* **197** (2001), 13-24.
19. Vlachos, Th.: A sphere theorem for odd-dimensional submanifolds of spheres. *Proc. Amer. Math. Soc.* **130** (2002), 167-173.
20. Vlachos, Th.: Intrinsic obstructions to the existence of isometric minimal immersions. *Pacific J. Math.* **205** (2002), 491-510.
21. Vlachos, Th.: Congruence of minimal surfaces and higher fundamental forms. *Manuscripta Math.* **110** (2003), 77-91.
22. Vlachos, Th.: The Ricci curvature of submanifolds and its applications. *Quarterly J. Math.* **55** (2004), 225-230.
23. Hasanis, Th. and Vlachos, Th.: Curvature properties of hypersurfaces. *Arch. Math. (Basel)* **82** (2004), 570-576.
24. Hasanis, Th., Savas-Halilaj, A. and Vlachos, Th.: Complete minimal hypersurfaces in a sphere. *Monatsh. Math.* **145** (2005), 301-305.
25. Vlachos, Th.: A characterization of the Clifford torus. *Arch. Math. (Basel)* **85** (2005), 175-182.
26. Hasanis, Th., Savas-Halilaj, A. and Vlachos, Th.: Minimal hypersurfaces with zero Gauss-Kronecker curvature. *Illinois J. Math.* **49** (2005), 523-529.
27. Vlachos, Th.: Conformal hypersurfaces with the same third fundamental form. *Differential Geom. Appl.* **23** (2005), 327-350.

28. Hasanis, Th., Savas-Halilaj, A. and Vlachos, Th.: Complete minimal hypersurfaces in  $\mathbb{S}^4$  with zero Gauss-Kronecker curvature. *Math. Proc. Camb. Phil. Soc.* **142** (2007), 125-132.
29. Hasanis, Th., Savas-Halilaj, A. and Vlachos, Th.: Complete minimal hypersurfaces in the hyperbolic space  $\mathbb{H}^4$  with vanishing Gauss-Kronecker curvature. *Trans. Amer. Math. Soc.* **359** (2007), 2799-2818.
30. Vlachos, Th.: Homology vanishing theorems for submanifolds. *Proc. Amer. Math. Soc.* **135** (2007), 2607-2617.
31. Vlachos, Th.: Isometric deformations of surfaces preserving the third fundamental form. *Ann. Mat. Pura Appl. (4)* **187** (2008), 137-155.
32. Hasanis, Th. and Vlachos, Th.: Hypersurfaces and Codazzi tensors. *Monatsh. Math.* **154** (2008), 51-58.
33. Vlachos, Th.: Minimal surfaces, Hopf differentials and the Ricci condition. *Manuscripta Math.* **126** (2008), 201-230.
34. Hasanis, Th., Savas-Halilaj, A. and Vlachos, Th.: Minimal graphs in  $\mathbb{R}^4$  with bounded Jacobians. *Proc. Amer. Math. Soc.* **137** (2009), 3463-3471.
35. Vlachos, Th.: Almost-Einstein hypersurfaces in the Euclidean space. *Illinois J. Math.* **53** (2009), 1221-1235.
36. Hasanis, Th., Savas-Halilaj, A. and Vlachos, Th.: On the Jacobians of minimal graphs in  $\mathbb{R}^4$ . *Bull. London Math. Soc.* **137** (2011), 3463-3471.
37. Dajczer, M. and Vlachos, Th.: Isometric immersions of warped products. *Proc. Amer. Math. Soc.* **141** (2013), 1795-1803.
38. Vlachos, Th.: Integral curvature and topological obstructions for submanifolds. *Geom. Dedicata* **166** (2013), no. 1, 289-305.
39. Vlachos, Th.: Isometric deformations of minimal surfaces in  $\mathbb{S}^4$ . *Illinois J. Math.* **58** (2014), no. 2, 369-380.
40. Dajczer, M. and Vlachos, Th.: The dual superconformal surface. *Ann. Global Anal. Geom.* **48** (2015), no. 1, 1-22.
41. Dajczer, M. and Vlachos, Th.: The associated family of an elliptic surface and an application to minimal submanifolds. *Geom. Dedicata* **178** (2015), 259-275.

42. Dajczer, M. and Vlachos, Th.: A class of superconformal surfaces. *Ann. Mat. Pura Appl. (4)* **194** (2015), 1607-1618.
43. Dajczer, M. and Vlachos, Th.: Isometric deformations of isotropic surfaces, *Arch. Math. (Basel)* **106** (2016), 189-200.
44. Vlachos, Th.: Exceptional minimal surfaces in spheres, *Manuscripta Math.* **150** (2016), no. 1, 73-98. DOI: 10.1007/s00229-015-0792-0.
45. Dajczer, M. and Vlachos, Th.: A representation for pseudoholomorphic surfaces in spheres, *Proc. Amer. Math. Soc.* **144** (2016), no. 7, 3105-3113. <http://dx.doi.org/10.1090/proc/12989>.
46. Dajczer, M. and Vlachos, Th.: A class of minimal submanifolds in spheres, *J. Math. Soc. Japan.* **69** (2017), 1197-1212.
47. Dajczer, M., Kasioumis, Th., Savas-Halilaj, A. and Vlachos, Th.: Complete minimal submanifolds with nullity in Euclidean space, *Math. Z.* DOI 10.1007/s00209-016-1833-4
48. Dajczer, M. and Vlachos, Th.: The infinitesimally bendable Euclidean hypersurfaces, *Ann. Mat. Pura Appl. (4)*. DOI 10.1007/s10231-017-0641-8
49. Onti, C.R. and Vlachos, Th.: Almost conformally flat hypersurfaces, to appear in *Illinois J. Math.*
50. Dajczer, M. and Vlachos, Th.: A class of complete minimal submanifolds and their associated families of genuine deformations, to appear in *Comm. Anal. Geom.*
51. Dajczer, M., Kasioumis, Th., Savas-Halilaj, A. and Vlachos, Th.: Complete minimal submanifolds with nullity in Euclidean spheres, to appear in *Comment. Math. Helv.*

### Submitted papers

1. Eschenburg, J.-H. and Vlachos, Th.: Pseudoholomorphic curves in  $\mathbb{S}^6$  and  $\mathbb{S}^5$ .
2. Polymerakis, K. and Vlachos, Th.: On the moduli space of isometric surfaces with the same mean curvature in 4-dimensional space forms.
3. Onti, C.R. and Vlachos, Th.: Topological obstructions for submanifolds in low codimension.