

# Leoni Evaggelatou-Dalla

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Birthdate : 10 June 1950  
Place of Birth : Kefallonia, Greece

## Education

- 1981 **Ph.D in Mathematics**  
University College London  
*London University*  
SUPERVISOR : D. G. Larman
- 1977 **M.Sc. in Pure Mathematics** (*Distinction*)  
Birkbeck College  
*London University*
- 1972 **Degree in Mathematics** (*Excellent*)  
*National & Kapodistrian University of Athens*

## Academic career - Teaching

- 1973-1976  
1981-today **National & Kapodistrian University of Athens**  
Department of Mathematics (undergraduate & post-graduate)  
Department of Physics  
Department of Chemistry  
Department of Informatics & Telecommunications
- 2001-2002  
2003-2004 **University of Cyprus** (visiting professor)  
Department of Mathematics & Statistics  
Department of Public and Business Administration  
Department of Physics  
Department of Informatics
- 1988-1989  
1995-1996 **University College London** (Research Fellow)  
Department of Mathematics

## Ph.D. theses advised

- N. Katseli (Assistant Prof., Dept. Mathematics, Univ. of Athens)
- V. Drakopoulos (High school teacher, Dept. of Informatics & Telecommunications, Univ. of Athens)
- P. Bouboulis (High school teacher, Dept. of Informatics & Telecommunications, Univ. of Athens)

## M.Sc. theses advised

16 M.Sc. theses in graduate programs at “Pure Mathematics”, “Applied Mathematics” and “Teaching and Methodology of Mathematics” of the Mathematics Department, Univ. of Athens

## Publications

### 1. Peer-reviewed articles

P. Bouboulis, S. Theodoridis, C. Mavroforakis, and **L. Dalla** (2015). Complex support vector machines for regression and quaternary classification. *IEEE Trans. Neural Netw. Learning Syst.* **26** (6), 1260–1274.

P. Bouboulis, **L. Dalla**, and M. Kostaki-Kosta (2007). Construction of smooth fractal surfaces using Hermite fractal interpolation functions. *Bulletin of the Greek Mathematical Society* **54**, 179–196.

P. Bouboulis and **L. Dalla** (2007a). Fractal interpolation surfaces derived from fractal interpolation functions. *Journal of Mathematical Analysis and Applications* **336** (2), 919–936.

P. Bouboulis and **L. Dalla** (2007b). Closed fractal interpolation surfaces. *Journal of Mathematical Analysis and Applications* **327** (1), 116–126.

P. Bouboulis and **L. Dalla** (2007c). A general construction of fractal interpolation functions on grids of  $\mathbb{R}^n$ . *European Journal of Mathematical Analysis and Applications* **18** (4), 449–476.

**L. Dalla** and E. Samiou (2007). Curvature and  $q$ -strict convexity. *Beiträge zur Algebra und Geometrie* **48** (1), 83–93.

P. Bouboulis, **L. Dalla**, and V. Drakopoulos (2006a). Construction of recurrent bivariate fractal interpolation surfaces and computation of their box-counting dimension. *Journal of Approximation Theory* **141** (2), 99–117.

P. Bouboulis, **L. Dalla**, and V. Drakopoulos (2006b). Image compression using recurrent bivariate fractal interpolation functions. *International Journal of Bifurcation and Chaos* **16** (7), 2063–2071.

**L. Dalla** and T. Hatziafratis (2006). Strict convexity of sets in analytic terms. *Journal of the Australian Mathematical Society* **81**, 49–61.

P. Bouboulis and **L. Dalla** (2005). Hidden variable vector valued fractal interpolation functions. *Fractals* **13** (3), 227–232.

**L. Dalla**, V. Drakopoulos, and M. Prodromou (2003). On the box dimension for a class of non-affine fractal interpolation functions. *Analysis in Theory and Applications* **19** (3), 220–233.

**L. Dalla** (2002). Bivariate fractal interpolation functions on grids. *Fractals* **10** (1), 53–58.

**L. Dalla** (2001). A note on the Fermat-Torricelli point of a  $d$ -simplex. *Journal of Geometry* **70**, 38–43.

**L. Dalla**, D. G. Larman, P. Mani-Levitska, and C. Zong (2000). The blocking numbers of convex bodies. *Discrete & Computational Geometry* **24**, 267–277.

**L. Dalla** and V. Drakopoulos (1999). On the parameter identification problem in the plane and the polar fractal interpolation functions. *Journal of Approximation Theory* **101**, 289–302.

I. Bárány and **L. Dalla** (1997). Few points to generate a convex polytope. *Mathematika* **44**, 325–331.

**L. Dalla** and N. K. Tamvakis (1996). An isoperimetric inequality in the class of simplicial polytopes. *Mathematica Japonica* **44** (3), 569–572.

**L. Dalla** and D. G. Larman (1990). Volumes of a random polytope in a convex set. *Applied Geometry and Discrete Mathematics*, 175–180.

**L. Dalla** (1989). On a class of some special sets on the  $k$ -skeleton of a convex compact set. *Israel Journal of Mathematics* **68** (3), 353–364.

**L. Dalla**, S. Giotopoulos, and N. Katseli (1989). The socle and finite-dimensionality of a semiprime Banach algebra. *Studia Mathematica* **XCII**, 201–204.

**L. Dalla** (1988). Increasing paths leading to a face of a convex compact set in a Hilbert space. *Acta Mathematica Hungarica* **52** (3–4), 195–198.

**L. Dalla**, S. Giotopoulos, and N. Katseli (1987). Skeletons of the unit ball of a  $C^*$ -algebra. *Mathematica Balkanica* **1**, 83–88.

**L. Dalla** (1987). On the measure of the one-skeleton of the sum of convex compact sets. *Journal of the Australian Mathematical Society (Series A)* **42**, 385–389.

**L. Dalla** (1986). Increasing paths on the one-skeleton of a convex compact set in a normed space. *Pacific Journal of Mathematics* **124** (2), 289–294.

**L. Dalla** and N. K. Tamvakis (1985). Sets of constant width and diametrically complete sets in normed spaces. *Bulletin of the Greek Mathematical Society* **26**, 27–39.

**L. Dalla** (1983). The  $n$ -dimensional Hausdorff measure of the  $n$ -skeleton of a convex  $w$ -compact set (body). *Mathematische Nachrichten* **123**, 131–135.

**L. Dalla** and D. G. Larman (1980). Convex bodies with almost all  $k$ -dimensional sections polytopes. *Mathematical Proceedings of the Cambridge Philosophical Society* **88**, 395–401.

## 2. Other publications

S. Anagnostopoulou, **L. Dalla** and P. Koultouki (2015), A fractal approach of ‘ego’. *Mathematical Gazette* **75**, **81-82**, 3-17 (in greek).

**L. Dalla** and G. K. Papageorgiou (2012). Metrics and norms used for obtaining sparse solutions to underdetermined systems of linear equations, [arXiv: 1203.4579 \[math.OC\]](https://arxiv.org/abs/1203.4579).

**L. Dalla** and D.-D. Stergiopoulou (2011). The theorems of Radon, Carathéodory and Helly. *Mathematical Gazette* **75**, **75-76**, 135-148 (in greek).

**L. Dalla** and A. Paspapropoulou (2010). The Upper Bound theorem for the number of faces of a polytope in  $\mathbb{R}^d$ . *Mathematical Gazette* **73**, 66-98 (in greek).

V. Drakopoulos and **L. Dalla** (1999). Space filling curves generated by fractal interpolation functions. *Numerical Methods and Applications: Recent advances in Numerical Methods*. Ed. by O. Iliev, M. Kaschiev, S. Margenov Bl. Sendov and P. Vassilevski. World Scientific, 784–792.

V. Drakopoulos, V. Tziouvas, A. Bohm, and **L. Dalla** (1999). Fractal interpolation techniques for the generation of space filling curves. *Hellenic European Conference in Computer Mathematics and its Applications*. Ed. by H. Lipitakis, LEA.

V. Drakopoulos and **L. Dalla** (1997). The new dimension of pedagogical mathematical thought. *14o Panhellenic Conference of Mathematical Education, Greek Mathematical Society*, 235–243 (in greek).

**L. Dalla** and C. Damianou (1996). An estimation of the box dimension of Greater Athens. *Tech. Chron. A*, 9–15.

**L. Dalla**, V. Drakopoulos and A. Bömh (1995). Elements of Fractal Geometry. *Mathematical Gazette* **43**, 21-41 (in greek).