

Curriculum Vitae
Poulou N. Marilena

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I received my B.Sc degree from King’s College in Joint Honors Physics and Mathematics and moved on in receiving my Masters in Mathematics from Imperial College. I received with distinction my PhD from the National Technical University of Athens from the School of Applied Mathematical and Physical Science.

Undergraduate courses

Differential Eqn, Numerical Analysis 1, 2, Discrete Mathematics, Number Theory, Calculus 1,2, Analysis 1,2, Fourier Analysis, Linear Algebra and Analytical Geometry, Algebra, Dynamical systems, Probabilities and Statistics, Applied Mathematics, Numerical methods and Introduction to Mathematical programming using Mathematica, Matlab, Maple.

Postgraduate courses

Number Theory, Methods on Numerical Analysis, Graph theory, Dynamical systems and Chaos, Educational Research Methodology, Data Mining, Machine Learning.

Research Interests

1	Non linear PDE’s, asymptotic behavior of dynamical systems, global attractors, dimensions of global attractors.
2	Stochastic PDE’s.
3	Fractional PDE’s, existence and uniqueness of global solutions
4	Fully discrete PDE’s (time and space discretization)
5	Klein Gordon Schrodinger systems
6	Machine learning, Educational Methodology and Data Mining, e-learning, time series, predictive analysis (python, R, matlab SPSS, Mathematica,)

REVIEWING ACTIVITIES

2020-	Mathematical Methods in the Applied Sciences, Wiley
2018-	Advances in Difference Equations, Springer

Research Projects-Positions and Scholarships

1. **Laboratoire Paul Painleve, University of Lille, France**
Research position, Collaboration with Pr. O. Goubet,
2. **Learn2Analyze (L2A): An Academia-Industry Knowledge Alliance for enhancing Online Training Professionals' (Instructional Designers and e-Trainers) Competences in Educational Data Analytics**
Position: Statistical Analysis of the data.
3. **Massive Open Online Courses, MOOCs, MATH0 – “Basic Mathematical Concepts “, Hellenic Open University.**
Position: Development of educational material and Implementation of the online course
[Μαζικά Ανοικτά Διαδικτυακά Μαθήματα – Ανοικτή πρόσβαση στη γνώση! \(eap.gr\)](http://eap.gr), [ΜΑΘ0 Βασικές Μαθηματικές Έννοιες – Μαζικά Ανοικτά Διαδικτυακά Μαθήματα \(eap.gr\)](http://eap.gr)
4. **Université de Picardie Jules Verne, France**
Research position in LAMFA, UMR 7352CNRS UPJV. Collaboration with Pr. O. Goubet, 2ND Vice president Research Consultant
5. **Basic Research Program of the National Technical University of Athens No 65/1790**
Scholarship for Post PhD Dissertation.
6. **Mathematisches Institut, Georg - August - Universität Göttingen**
Position: Main speaker of the Seminar on “Klein-Gordon-Schrodinger Systems”.
7. **“Pythagoras”, Research Project No 68 / 831, Ministry of Education (EPEAEK II),**
Research position in LAMFA, UMR 7352CNRS UPJV. Collaboration with Pr. O. Goubet.
8. **E.L.E, National Technical University of Athens**
Scholarship for the PhD Dissertation.

Research Publications (recent)

- M. N. Poulou and M. E. Filippakis, “Global attractor of a dissipative Fractional KGS system”, J Dynamical Differential Equations (2020). <https://doi.org/10.1007/s10884-020-09907-7>
- Z. Papamitsiou, M. E. Filippakis, M. Poulou, D. Sampson, D. Ifenthaler, M. Giannakos, “Towards an Educational Data Literacy Framework: Enhancing the Profiles of Instructional Designers and e-Tutors of Online and Blended Courses with new Competences”, Smart Learn. Environ. 8, 18 (2021). <https://doi.org/10.1186/s40561-021-00163-w>
- M. Poulou, M. Filippakis and Z. Zanchetta, “Exponential Decay for a Klein-Gordon-Schrodinger System with locally Distributed Damping”, submitted in Electronic Journal of Qualitative Theory of Diff. Equations, 2022, <https://doi.org/10.21203/rs.3.rs-1753012/v2>
- M. N. Poulou and N. Zographopoulos “Global Attractor for a degenerate KGS Type system” Dynamical Systems, 2022, <https://doi.org/10.1080/14689367.2022.2145181>
- M. Poulou, M. Filippakis, A Random Attractor for a Stochastic Fractional KGS system, submitted in Dynamics and Differential Equations, Springer. (2025)
- O. Goubet and M. N. Poulou “Global attractor for weakly damped nonlinear parametric Klein-Gordon-Schrodinger system”, submitted in DCDS (2025).

Conferencies (recent)

- **PDE’s Seminar**, “Memory term of a KGS system”, University of Lille, 3 July 2025.
- **17 Συνέδριο Μαθηματικής Ανάλυσης**, “ Global Attractor for a Klein - Gordon - Schrödinger Type system”, **Πανεπιστήμιο Κύπρου 16-18 Σεπτεμβρίου 2022**, [17ο Πανελλήνιο Συνέδριο Ανάλυσης - Department of Mathematics and Statistics \(ucy.ac.cy\)](https://www.ucy.ac.cy)
- **AMS Special Session on Stochastic Models in Studying Biological Systems, II, joint mathematics meeting**, “ Global Attractor for a stochastic System of Klein - Gordon - Schrödinger Type”, **April 6-9, 2022, Virtual**
- **AMS Special Session on Asymptotic Behavior of Evolution Equations, II, , joint mathematics meeting**, A study on a Klein Gordon Schrödinger system with locally distributed damping, **April 6-9, 2022, Virtual**
- **AMS Special Session on Analysis of Fractional, and Stochastic Dynamic Systems with Applications, I, Joint Mathematics Meetings**, Global Attractor for a stochastic System of Klein - Gordon - Schrödinger Type. , January 6-9, 2021
- **AMS Special Session on Analysis of Fractional, and Stochastic Dynamic Systems with Applications, I, M.M joint mathematics meeting**, “Global attractor of a dissipative Fractional KGS system “*January 5-9 2021, AMS-MAA. Virtual*
- **2020 Joint Mathematics Meeting, AMS Contributed Paper Session on Dynamical Systems and Ergodic Theory**, "A Fractional nonlinear Schrödinger -Poisson System", January 15-18 2020, Denver, USA. **Virtual**
- **International Conference Singular Problems, Blow-up and Regimes with Peaking in Nonlinear PDEs** "Energy decay of Klein-Gordon- Schrödinger type system with nonlinear memory term", RUDN, University, Moscow Russia, **November 10-14, 2019.**
- **2019 Joint Mathematics Meeting**, "A study on the Fractional nonlinear Schrodinger-Poisson System", **January 16-1 2019, Baltimore, USA.**