Βιογραφικό Σημείωμα

Όνομα	**Ευθυμία Μελετλίδου**
Θέση	Επίκουρος καθηγήτρια,Τμήμα Φυσικής Α.Π.Θ.
Σπουδές	Πτυχίο Τμήματος Φυσικής Α.Π.Θ. 1990 Μεταπτυχιακό Πανεπιστήμιο Λονδίνου 1991 Διδακτορικό Τμήμα Φυσικής Α.Π.Θ. 1996
Επιστημονική Εμπειρία	Human Capital and Mobility CHRX-CT93-0330/DG 'Order and Chaos in Conservative Dynamical Systems' (1994-1996, επιστ. υπεύθυνος καθ. κ. Ι. Χατζηδημητρίου) ΠΕΝΕΔ-95 No 1857 με τίτλο «Τάξη και χάος σε συντηρητικά δυναμικά συστήματα και εφαρμογές στην Αστρονομία, την Ουράνια Μηχανική και Ατομική Φυσική» (επιστ. υπεύθυνος αν. καθ. κ. Χ. Βάρβογλης) TMR FMRX-CT-960062 με τίτλο "Spatio-temporal instabilities in deformation and fracture mechanics, materials science and nonlinear physics aspects" (επιστ. υπεύθ. καθ. κ. Η. Αϋφαντής) Από το Μάρτιο 2004-2007 ήμουν επιστημονικώς υπεύθυνη του Ερευνητικού Προγράμματος ΠΥΘΑΓΟΡΑΣ No. 21879 «Δυναμικά Συστήματα: Συμμετρίες, ολοκληρωσιμότητα και μη ολοκληρωσιμότητα» Από τον Σεπτέμβριο 2007-2009 ήμουν επιστημονικώς υπεύθυνος στο Collaborative Linkage Grant του N.A.T.O. «Forecasting the Effect of Infectious Disease Outbreaks» CLG 982791.
Ερευνητικό Έργο	Ι. Δημοσιεύσεις σε επιστημονικά περιοδικά με κριτές E1. S.Ichtiaroglou & E.Meletlidou: 1990, 'On monoparametric families of orbits sufficient for integrability of planar potentials with linear and quadratic invariants', J. Phys. A: Math. Gen. **23**, 3673-3679. E2. S.Ichtiaroglou, G.Voyatzis & E.Meletlidou: 1991, 'Conditions for the existence of periodic solutions to integrable two-dimensional Hamiltonian systems', Phys. Rev. **43A**, 7043-7045. E3. E.Meletlidou & S.Ichtiaroglou: 1994, 'A criterion for non-integrability based on Poincaré's theorem', Physica D **71**, 261-268.

	E4. E.Meletlidou & S.Ichtiaroglou: 1994, 'On the non-existence of an analytic integral of motion in periodically perturbed one degree of freedom Hamiltonian systems', Phys. Lett. A **188**, 157-163. E5. E.Meletlidou & S.Ichtiaroglou: 1994, 'On the number of isolating integrals in perturbed Hamiltonian systems with n≥3 degrees of freedom', J. Phys. A: Math. Gen. **27**, 3919-3926. E6. S.Ichtiaroglou & E.Meletlidou: 1996, 'Ψ-series and obstructions to integrability of periodically perturbed one degree of freedom Hamiltonians', Phys. Lett. A **224**, 68-76. E7. U.Locatelli & E.Meletlidou: 1998, 'Convergence of Birkhoff normal form for essentially isochronous systems', Meccanica **33**, 195-211. E8. G.Bozis & E.Meletlidou: 1998, 'Nonintegrability detected from geometrically similar orbits', Celest. Mech. Dyn. Astron. **68**, 335-346. E9. E.Meletlidou & S.Ichtiaroglou: 1999, 'Isolated periodic orbits and stability in separable potentials', Celest. Mech. Dyn. Astron. **71**, 289-300. E10. K.Wodnar, S.Ichtiaroglou & E.Meletlidou: 1999, 'Non-integrability and continuation of fixed points of 2n-dimensional perturbed twist maps', Physica D **128**, 70-86. E11. S. Ichtiaroglou, E.Meletlidou & K.Wodnar: 2000, 'A method for evaluating the stability of fixed points in perturbed symplectic maps', Chaos, Solitons and Fractals **11**, 245-250. E12. E.Meletlidou: 2000, 'A nonintegrability test for perturbed separable planar Hamiltonians', Phys. Lett. A, **270**, 47-54. E13. E.Meletlidou: 2000, 'The Mel'nikov subharmonic function and the non-existence of analytic integrals in non-autonomous systems', Celest. Mech. Dyn. Astr.**78**, 161-166. E14. E.Meletlidou, S.Ichtiaroglou and F.J. Winterberg: 2001 'Non-integrability of Hill's lunar problem', Celest. Mech. Dyn. Astr. **80**, 145-156. E15. E.Meletlidou, G.Voyatzis and S.Ichtiaroglou: 2001 'Obstructions to the continuation of analytic integrals of Hamiltonian systems under non-Hamiltonian perturbations' Phys. Lett. A, **286**, 55-60.

	E16. E.Meletlidou, J.Pouget, G.Maugin and E.Aifantis: 2002, 'The relation between energy and pseudomomentum in the elastic-crystal Boussinesq equation', J. Mech. Behaviour of Materials, **13**, 107-115 E17. G.Voyatzis, E.Meletlidou and S.Ichtiaroglou: 2002 'Large-scale chaos for arbitrarily small perturbations in nontwist Hamiltonian systems', Chaos, Solitons and Fractals **14**, 1179-1191. E18. F.J.Winterberg and E.Meletlidou: 2004 'Non-continuation of integrals of the rotating two-body problem in Hill's lunar problem', Celest. Mech. Dyn. Astr. **88**, 37-49. E19. E.Meletlidou, J.Pouget, G.Maugin and E.Aifantis: 2004, 'Invariant relations in a Boussinesq type equation' Chaos, Solitons and Fractals **22**, 613-625. E20. E.Meletlidou, G.Stagika and S.Ichtiaroglou: 2005, 'Nonintegrability and structure of the resonance zones in a class of galactic potentials', Celest. Mech. Dyn. Astr. **91**, 323-335. E21. D.Voyatzi and E.Meletlidou: 2006, 'A nonintegrability criterion for adiabatic systems', Int. J. of Bifurcation and Chaos **16**, No 6, 1829-1833. E22. E.Meletlidou and G.Stagika: 2006, 'On the continuation of degenerate periodic orbits in Hamiltonian systems', Regular & Chaotic Dynamics **11**, 131-138. E23. E.Meletlidou and P.G.L.Leach: 2007, 'Singularity analysis in nonlinear biomathematical models: Two case studies', Chaos, Solitons and Fractals **34**, 903-913. E24. D. Voyatzi and E. Meletlidou: 2008, "Criteria for large-scale chaos in the problem of homogeneous magnetization", Nonlinear Phenomena in Complex System, Vol **11**, No 2, 269-273. E25. I.I.Maglevany, E.Meletlidou, G.Stagika: 2011, "Numerical investigation of bifurcations of equilibria and Hopf bifurcations in disease transmission models", Communications in Nonlinear Science and Numerical Simulations, Vol **16**, No 1, 284-295. E26. Maaita J.O.. Tsaklidis G, Meletlidou E., 2013, «The Homogeneous Markov System (HMS) as an elastic medium The three-dimensional case», Communications in Statistics-Theory and Methods

	(accepted). E27. Maaita J.O., Meletlidou E., Vakakis A. F, Rothos V., 2013, «The effect of Slow Flow Dynamics on the Oscillations of a singular damped system with an essentially nonlinear attachment» Journal of Applied Nonlinear Dynamics, (accepted). II. Δημοσιεύσεις σε πρακτικά συνεδρίων με κριτές Σ1. E.Meletlidou & S.Ichtiaroglou: 1994, 'A non-integrability test for perturbed Hamiltonian systems of two degrees of freedom' in J.Seimenis (ed.) 'Hamiltonian Mechanics: Integrability and chaotic behavior', NATO ASI Series, Plenum, NY, 221-228. Σ2. S.Ichtiaroglou & E.Meletlidou: 1998, 'The non-integrability of perturbed Hamiltonian systems of n degrees of freedom and the continuation of periodic orbits' in C.Simo (ed.) 'Hamiltonian sytems with three or more degrees of freedom', NATO ASI Series, Plenum, NY, 429-433. Σ3. K.Wodnar, M.Hampejs, E.Meletlidou and S.Ichtiaroglou: 1999, "The symplectic eigenvalue problem, Lyapunov numbers and related questions", in R.Dvorak *et al.* (eds.) "Modern Astrometery and Astrodynamics", Austrian Academy of Science, Vienna, pp. 233-278. Σ4. E.Meletlidou: 2001, 'The Mel'nikov subharmonic function and the non-existence of analytic integrals in non-autonomous systems' in R.Dvorak and J.Henrard (eds.) "New Developments in the Dynamics of Planetary Systems", Kluwer Academic Publishers pp. 161-166. Σ5. D.Voyatzi and E.Meletlidou: 2006, "A criterion on the nonexistence of exact invariants in adiabatic systems", in "Recent Advances in Astronomy and Astrophysics" (Editor: N. Solomos), American Institute of Physics (AIP) Conference Series vol. 848, pp.753-757.
Πέντε Κυριότερες Επιστημονικές Δημοσιεύσεις	E5. E.Meletlidou & S.Ichtiaroglou: 1994, 'On the number of isolating integrals in perturbed Hamiltonian systems with n≥3 degrees of freedom', J. Phys. A: Math. Gen. **27**, 3919-3926. E10. K.Wodnar, S.Ichtiaroglou & E.Meletlidou: 1999, 'Non-integrability and continuation of fixed points of 2n-dimensional perturbed twist maps', Physica D **128**, 70-86.

	E14. E.Meletlidou, S.Ichtiaroglou and F.J. Winterberg: 2001 'Non-integrability of Hill's lunar problem', Celest. Mech. Dyn. Astr. **80**, 145-156. E22. E.Meletlidou and G.Stagika: 2006, 'On the continuation of degenerate periodic orbits in Hamiltonian systems', Regular & Chaotic Dynamics **11**, 131-138. E25. I.I.Maglevany, E.Meletlidou, G.Stagika: 2011, "Numerical investigation of bifurcations of equilibria and Hopf bifurcations in disease transmission models", Communications in Nonlinear Science and Numerical Simulations, Vol **16**, No 1, 284-295.