CURRICULUM VITAE

Surname: Name: Date of Birth: Place of Birth: Marital Status: e-mail: Perdiou Angela April 19, 1974 Kalamata, Greece Married with one children perdiou@upatras.gr

EDUCATION

- ✓ B.Sc. in Mathematics, Department of Mathematics, University of Patras, Greece (1997).
- ✓ M.Sc. in Computational Mathematics and Informatics, Department of Mathematics, University of Patras, Greece (2003).
- ✓ Ph.D. in Celestial Mechanics, Department of Engineering Sciences, University of Patras (2006).

ACADEMIC POSITIONS HELD

- ✓ September 2003 June 2006: Laboratory Fellow, Department of Applied Informatics in Management & Finance, Technological Educational Institute of Messolonghi.
- ✓ October 2006 June 2009: Scientific Fellow, Department of Applied Informatics in Management & Finance, Technological Educational Institute of Messolonghi.
- ✓ June 2010 August 2013: Lecturer, Department of Engineering Sciences, University of Patras, Greece.
- ✓ August 2013 : Lecturer, Department of Civil Engineering, University of Patras, Greece.

RESEARCH PROGRAMS

Scientific coordinator of a "K. Karatheodory" research program of the University of Patras (2011-2014).

RESEARCH ACTIVITIES

She has published papers in the following fields: Celestial Mechanics, Nonlinear Dynamical Systems in Molecular Physics, Stability and Bifurcation Theory. She is a reviewer in the following international scientific journals: New Astronomy, Mathematical Problems in Engineering.

TEACHING EXPERIENCE

From 2003 to 2009 she taught "Algorithms", "Data Structures", "Programming in C" and "Statistics I" in the Department of Applied Informatics in Management & Finance of the Technological Educational Institute of Messolonghi. Since 2010 she has taught courses of Applied Mathematics and Laboratories in Mathematics as well as in Numerical Analysis in several Departments of the Engineering School of the University of Patras.

PUBLICATIONS

Journal publications

- J1. V.S. Kalantonis, E.A. Perdios, A.E. Perdiou and M.N. Vrahatis: "Computing with Certainty Individual Members of Families of Periodic Orbits of a Given Period", *Celestial Mechanics and Dynamical Astronomy*, 80, 81-96 (2001).
- J2. M.N. Vrahatis, A.E. Perdiou, V.S. Kalantonis, E.A. Perdios, K. Papadakis, R. Prosmiti and S.C. Farantos,: "Application of the Characteristic Bisection Method for Locating and Computing Periodic Orbits in Molecular Systems", *Computer Physics Communications*, 138, 53-68 (2001).
- J3. E.A. Perdios, O. Ragos, A.E. Perdiou and M.N. Vrahatis: "Symmetric doubly asymptotic orbits in the photogravitational restricted tree-body problem", *Nonlinear Analysis*, 47, 3443-3448 (2001).
- J4. A.E. Perdiou, V.S. Kalantonis, E.A. Perdios and M.N. Vrahatis,: "Application of Efficient Composite Methods for Computing with Certainty Periodic Orbits in Molecular Systems", *Computer Physics Communications*, 148, 227-235 (2002).
- J5. V.S. Kalantonis, E.A. Perdios, A.E. Perdiou, O. Ragos and M.N. Vrahatis,: "On the Application of Optimization Methods to the Determination of Members of Families of Periodic Solutions", *Astrophysics and Space Science*, 288, 581-590 (2003).
- J6. V.S. Kalantonis, E.A. Perdios, A.E. Perdiou, O. Ragos and M.N. Vrahatis,: "Deflation Techniques for the Determination of Periodic Solutions of a Certain Period", *Astrophysics and Space Science*, 288, 591-599 (2003).
- J7. A.E. Perdiou, V.V. Markellos and C.N. Douskos,: "The Hill Problem with Oblate Secondary: Numerical Exploration", *Earth, Moon, and Planets*, 97, 127-145 (2005).
- J8. V.S. Kalantonis, E.A.Perdios and A.E. Perdiou,: "The Sitnikov Family and the Associated Families of 3D Periodic Orbits in the Photogravitational RTBP with Oblateness", *Astrophysics and Space Science*, 315, 323-334 (2008).
- J9. M.P. Markakis, A.E. Perdiou and C.N. Douskos,: "The Photogravitational Hill Problem with Oblateness: Equilibrium Points and Lyapunov Families", *Astrophysics and Space Science*, 315, 397-306 (2008).
- **J10.** A.E. Perdiou,: "Multiple Periodic Orbits in the Hill Problem with Oblate Secondary", *Earth, Moon, and Planets* **130**, 105-118.

- **J11.** Perdiou, A.E., Perdios, E.A. and Kalantonis, V.S.: "Periodic orbits of the Hill problem with radiation and oblateness", *Astrophysics and Space Science*, **342**, 19-30 (2012).
- J12. A.E. Perdiou, A.A Nikaki. and E.A. Perdios: "Periodic motions in the spatial Chermnykh restricted three-body problem", *Astrophysics and Space Science*, 345, 57-66 (2013).

Conference publications

- C1. V.S. Kalantonis, A.E. Perdiou and E.A. Perdios: "On Regions of Convergence of Newton's Method for Computing Periodic Orbits on a Surface of Section", 4th GRACM Congress on Computational Mechanics, 27-29 June, 2002, Patras, Greece, pp. 1288-1293.
- C2. V.S. Kalantonis, E.A. Perdios and A.E. Perdiou: "An Effect of Oblateness on Families of Periodic Orbits in the Restricted Three-Body Problem", ed. D. Tsahalis, 2nd International Conference "From Scientific Computing to Computational Engineering" (2nd IC-SCCE), 5-8 July, 2006, Athens, Greece, pp. 217-223.
- C3. Perdiou, A.E., Douskos, C.N., Kalantonis, V.S.,: 2008, "Homoclinic Connections in the Hill Problem with Radiation", in Varvoglis, H., Knezevic, Z. (eds) *Dynamics of Celestial Bodies*, in honor of Prof. John D. Hadjidemetriou, Aristotle University of Thessaloniki and Astronomical Observatory of Belgrade, pp. 169-172.