

## George Throumoulopoulos

### Personal Details

Born on 28 March 1956 in Fortosi, prefecture of Ioannina, Greece

Family status: Married and father of two children

Official address: Section of Astrogeophysics, Department of Physics,  
University of Ioannina (Uoi), POB 1186, GR 451 10 Ioannina, Greece

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### Education, titles, professional positions

Associate Professor, Uoi (2007- )

Assistant Professor, Uoi (1998-2006)

Lecturer, Uoi (1990-98)

PhD, Plasma Physics, Uoi 1989

BSc Physics, Uoi 1979

**Teaching Experience:** Teaching of the following courses in the Departments of Physics and Mathematics of Uoi (1989- ): Differential Equations, Introduction to Complex Functions, Mathematical Methods of Physics, Mathematical Physics, General Physics, Classical Mechanics, Classical Electrodynamics, Statistical Physics, Resources of Energy, Natural Sources of Energy-Natural Resources and Protection of the Environment, Plasma Physics (undergraduate and post graduate), Numerical Methods of Mathematical Physics (graduate)

*Lecture notes:* Introduction to Plasma Physics, G. Pantis, G. Throumoulopoulos, Uoi, 1998

**Theses Supervision:** One PhD and six MSc theses (defended); two PhD projects under way; participation in a number of thesis advisory and examination committees.

**Research Interests:** Focused mainly on fusion plasma physics, in particular on the linear and nonlinear equilibrium and stability of magnetically confined plasmas. The research has been conducted within the frameworks of magnetohydrodynamics, two-fluid theory and kinetic theory.

**Publications :** 60 publications in international peer reviewed journals (28 carried out in the current position), 2 manuscripts submitted for publications, and 59 publications in conference proceedings (lists are provided below)

## Visits to research and educational Institutions

- Max-Planck Institute for Plasma Physics, Garching, Germany (1991- )  
Long-term collaboration conducted through missions to the host Institution of an overall period of about five years and supported by the European Commission through a Marie-Curie fellowship and mobility contracts.
- Université Libre de Bruxelles (ULB), 1995, Service de Physique Statistique, Plasmas et Optique Non Linéaire.

## Scientific Assignments

### 1. Coordinator of the following research projects:

- Investigation of negative-energy perturbations in certain classes of collisionless Maxwell-drift kinetic equilibria and of their impact on magnetic confinement systems, συμβόλαιο καθορισμένης συνεισφοράς (fixed contribution contract) μεταξύ της Euratom και του ΠΙ, 1996-1999. "Negative energy waves in connection with anomalous transport with applications to fusion plasmas", post doctoral Marie-Curie fellowship, Max-Planck Institute for Plasma Physics, Garching (1992-94)
- "Investigation of negative-energy perturbations in certain classes of collisionless Maxwell-drift kinetic equilibria and of their impact on magnetic confinement systems", local coordinator, fixed contribution contract between UoI and EURATOM (1996-1999)
- "Stationary MHD modes in magnetically confined plasmas", local coordinator, long term project within the participation of UoI in the National Programme of Thermonuclear Fusion (1999- ). This project is supported in part by the European Union and by the General Secretariat of Research and Technology of Greece
- "On ITER equilibria, stability, and dynamics with sheared flow in connection with advanced confinement regimes", principal investigator, joint project of UoI, Max-Planck Institute for Plasma Physics (Garching), Center of Theoretical Physics (CPT, Marseille), and University of Texas and Institute for Fusion Studies, approved by the EUROfusion consortium as complementary research project (2014)
- "Hamiltonian methods and numerical algorithms for fusion plasmas", principal investigator, joint project of UoI, National Technical University of Athens, Aristotle University of Thessaloniki, Max-Planck Institute for Plasma Physics (Garching), Center of Theoretical Physics (CPT, Marseille), Graz University of Technology, and University of Texas and Institute for Fusion Studies, approved by the EUROfusion consortium as complementary research project (2015-16)

### 2. Participation in the research project "Multi-dimensional multi-fluid plasma models for modeling the alpha particles from thermonuclear reactions using the two-fluid approximation" in collaboration with the Institute of Electronic Structure and Laser FORTH, Heraklion, Greece

3. Member (national delegate) of the Fusion Physics Committee, EUATOM (1999-2002)
4. Member (national delegate) of the Scientific and Technical Advisory Committee, EURATOM (2002-2007)
5. Member of the editorial board of the new broad-scientific-spectrum, peer reviewed journal "Heliyon", Elsevier, 2015-
6. Reviewer of the journals Physics of Plasmas, Plasma Physics and Controlled Fusion, Journal of Plasma Physics, Journal of Computational Physics and Plasma Science and Technology

**Citations:** about 200 citations on the published documents (without self-citations)

#### **Publications in Peer Reviewed Journals**

1. Time dependent net core breeding gain of fusion-fission symbiotic systems, G. N. Throumoulopoulos and G. Pantis, Fusion Technology **10**, 149 (1986)
2. The Grad-Shafranov equation under a conformal mapping transformation, Analytic solutions with emphasis on compact toroidal configurations, G. N. Throumoulopoulos and G. Pantis, Nucl. Fusion **26**, 1501 (1986)
3. Analytic axisymmetric MHD spheromak type equilibria in parabolic coordinates, G. N. Throumoulopoulos and G. Pantis, Phys. Lett. **A121**, 423 (1987)
4. Analytic axisymmetric magnetohydrodynamic equilibria of a plasma torus with toroidal mass flow, G. N. Throumoulopoulos and G. Pantis, Phys. Fluids **B1**, 1827 (1989)
5. Axisymmetric force-free states and relaxation of a spheroidal spheromak, G. N. Throumoulopoulos and G. Pantis, Plasma Phys. Control. Fusion **32**, 541 (1990)
6. Tokamak relaxation model with toroidal plasma rotation, G. N. Throumoulopoulos and G. Pantis, Phys. Lett. **A170**, 99 (1992)
7. Negative-energy modes in magnetically confined plasma in the framework of Maxwell-drift kinetic theory, G. N. Throumoulopoulos and D. Pfirsch,

- Phys. Rev. **E49**, 3290 (1994)
8. Negative-energy perturbations in circularly cylindrical equilibria within the framework of Maxwell-drift kinetic theory,  
G. N. Throumoulopoulos and D. Pfirsch,  
Phys. Rev. **E53** 2767 (1996)
  9. Magnetohydrodynamic equilibria of a cylindrical plasma with poloidal mass flow and arbitrary cross sectional shape,  
G. N. Throumoulopoulos and G. Pantis,  
Plasma Phys. Control. Fusion **38**, 1817 (1996)
  10. Cylindrical ideal magnetohydrodynamic equilibria with incompressible flows,  
G. N. Throumoulopoulos and H. Tasso,  
Phys. Plasmas **4**, 1492 (1997)
  11. Negative-energy perturbations in cylindrical equilibria with a radial electric field,  
G. N. Throumoulopoulos and D. Pfirsch,  
Phys. Rev. **E56** 5979 (1997)
  12. Axisymmetric ideal magnetohydrodynamic equilibria with incompressible flows,  
H. Tasso and G. N. Throumoulopoulos,  
Phys. Plasmas **5**, 2378 (1998)
  13. Nonlinear axisymmetric resistive magnetohydrodynamic equilibria with toroidal flow,  
G. N. Throumoulopoulos,  
J. Plasma Physics **59**, 303 (1998)
  14. A potential mechanism for the creation of reversed-magnetic-shear transport barriers in tokamaks,  
G. N. Throumoulopoulos and D. Pfirsch,  
Phys. Plasmas **6**, 3226 (1999)
  15. Ideal magnetohydrodynamic equilibria with helical symmetry and incompressible flows,  
G. N. Throumoulopoulos and H. Tasso,  
J. Plasma Physics **62**, 449 (1999)
  16. On resistive magnetohydrodynamic equilibria of axisymmetric toroidal plasma with flow,  
G. N. Throumoulopoulos and H. Tasso,  
J. Plasma Physics **64**, 601 (2000)
  17. On Lyapunov stability of nonautonomous mechanical systems,  
H. Tasso, G. N. Throumoulopoulos,  
Phys. Lett. A **271**, 413 (2000)

18. Axisymmetric equilibria of a gravitating plasma with incompressible flows,  
G. N. Throumoulopoulos and H. Tasso,  
Geophys. Astrophys. Fluid Dynamics **94**, 249 (2001)
19. Analytic magnetohydrodynamic equilibria of a magnetically confined plasma with sheared flows,  
Ch. Simintzis, G. N. Throumoulopoulos, G. Pantis, H. Tasso,  
Phys. Plasmas **8**, 2641 (2001)
20. Wall stabilization and the Mathieu-Hill equations,  
H. Tasso and G. N. Throumoulopoulos,  
Phys. Plasmas **9**, 2662 (2002)
21. Two-step control of wall mode and the monodromy matrix,  
H. Tasso, G. N. Throumoulopoulos,  
Phys. Lett. A **307**, 304 (2003)
22. Exact magnetohydrodynamic equilibria with flow and effects on the Shafranov shift,  
G. N. Throumoulopoulos, G. Poulipoulis, G. Pantis, H. Tasso,  
Phys. Lett. A **317**, 463 (2003)
23. On axisymmetric resistive magnetohydrodynamic equilibria with flow free of Pfirsch-Schlüter diffusion,  
G. N. Throumoulopoulos, H. Tasso,  
Phys. Plasmas **10**, 2382 (2003)
24. Cross-helicity and magnetized Trkal flows,  
H. Tasso, G. N. Throumoulopoulos,  
Phys. Plasmas **10**, 4897 (2003)
25. Comment on "Solitonlike solutions of the Grad-Shafarnov equation",  
G. N. Throumoulopoulos, K. Hizanidis, H. Tasso,  
Phys. Rev. Lett. **92**, 249501 (2004)
26. Instability theorem in magnetohydrodynamics revisited,  
H. Tasso, G. N. Throumoulopoulos,  
Phys. Plasmas **11**, 334 (2004)
27. Tokamak MHD equilibria with reversed magnetic shear and sheared flow,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso,  
Plasma Phys. Control. Fusion **46**, 639 (2004)
28. Elliptic and hyperelliptic magnetohydrodynamic equilibria,  
H. Tasso, G. N. Throumoulopoulos,  
Il Nuovo Cimento **119 B**, 959 (2004)

29. Toroidal flow-caused change in magnetic topology of equilibrium eigenstates,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso,  
Phys. Plasmas **12**, 042112 (2005)
30. Axisymmetric equilibria with anisotropic resistivity and toroidal flow,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso,  
Journal of Plasma Physics **72**, 213 (2006)
31. On Hall magnetohydrodynamics equilibria,  
G. N. Throumoulopoulos, H. Tasso,  
Physics of Plasmas **13**, 102504, 2006
32. On nonexistence of tokamak equilibria with purely poloidal flow,  
G. N. Throumoulopoulos, H. Weitzner, H. Tasso,  
Phys. Plasmas **13**, 122501 (2006)
33. Two-fluid tokamak equilibria with reversed magnetic shear and sheared flow,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso,  
J. Plasma Phys. **73**, 347 (2007)
34. On the existence of resistive magnetohydrodynamic equilibria,  
H. Tasso, G. N. Throumoulopoulos,  
Journal of Plasma Physics **73**, 285 (2007)
35. On the Vlasov approach to tokamak equilibria with flow,  
H. Tasso, G. N. Throumoulopoulos,  
J. Phys. A: Math. Theor. **40**, F631 (2007)
36. A sufficient condition for the linear stability of magnetohydrodynamic equilibria with  
field aligned incompressible flow,  
G. N. Throumoulopoulos, H. Tasso,  
Phys. Plasmas **14**, 122104 (2007)
37. Side conditioned axisymmetric equilibria with incompressible flow,  
G. N. Throumoulopoulos, H. Tasso, G. Poulipoulis,  
J. Plasma Physics **74**, 327 (2008)
38. Magnetohydrodynamic 'cat eyes' and stabilizing effects of plasma flow,  
G. N. Throumoulopoulos, H. Tasso, G. Poulipoulis,  
J. Phys. A: Math. Theor. **42**, 335501 (2009)
39. Magnetohydrodynamic counter-rotating vortices and combined stabilizing effects of  
magnetic field and plasma flow,  
G. N. Throumoulopoulos, H. Tasso,  
Phys. Plasmas **17**, 032508 (2010)
40. A comparison of Vlasov with drift kinetic and gyrokinetic theories,

H. Tasso and G. N. Throumoulopoulos,  
Phys. Plasmas **18**, 064507 (2011)

41. Lyapunov stability of flowing magnetohydrodynamic plasmas surrounded by resistive walls,  
H. Tasso and G. N. Throumoulopoulos,  
Phys. Plasmas **18**, 070702 (2011)
42. Up-down asymmetric tokamak equilibria with parallel flows,  
Ap Kuiroukidis and G N Throumoulopoulos,  
Plasma Phys. Control. Fusion **53**, 125005 (2011)
43. On MHD stability of gravitating electrically conducting fluids with field-aligned flows,  
H. Tasso and G. N. Throumoulopoulos,  
J. Plasma Physics **78**, 1 (2012)
44. International thermonuclear experimental-like extended Solovév equilibria with parallel flow,  
G. N. Throumoulopoulos and H. Tasso,  
Phys. Plasmas **19**, 014504 (2012)
45. Symmetric and asymmetric equilibria with non-parallel flows,  
Ap Kuiroukidis and G. N. Throumoulopoulos,  
Phys. Plasmas **19**, 022508 (2012)
46. Nonlinear translational symmetric equilibria relevant to the L–H transition,  
Ap Kuiroukidis and G. N. Throumoulopoulos,  
J. Plasma Physics **79**, 257 (2013)
47. On Lyapunov boundary control of unstable magnetohydrodynamic plasmas,  
H. Tasso and G. N. Throumoulopoulos, Phys. Plasmas **20**, 024505 (2013)
48. Paramagnetic Solovév equilibrium with flow,  
I. Arapoglou G. N. Throumoulopoulos, H. Tasso,  
Phys. Lett. A **377**, 310 (2013)
49. Vlasov versus reduced kinetic theories for helically symmetric equilibria,  
H. Tasso, G. N. Throumoulopoulos,  
Phys. Plasmas **20**, 042508 (2013)
50. Two dimensional nonlinear cylindrical equilibria with reversed magnetic shear and sheared flow,  
Ap Kuiroukidis and G. N. Throumoulopoulos,  
J. Plasma Physics **80**, 27 (2014)

51. Analytical up-down asymmetric equilibria with non-parallel flows,  
Ap Kuiroukidis and G. N. Throumoulopoulos,  
Phys. Plasmas **21**, 032509 (2014)
52. An analytic nonlinear toroidal equilibrium with flow,  
Ap Kuiroukidis and G. N. Throumoulopoulos,  
Plasma Phys. Control. Fusion **56** , 075003 (2014)
53. Tokamak-like Vlasov equilibria,  
H. Tasso and G. N. Throumoulopoulos,  
Eur. Phys. J. D **68** , 175 (2014)
54. The European integrated tokamak modeling (ITM) effort: achievements and first results,  
G. Falchetto et al.,  
Nucl. Fusion **54**, 043018L. (2014)
55. Generalized Solovév equilibrium with sheared flow of arbitrary direction and stability consideration,  
D. A. Kaltsas and G. N. Throumoulopoulos,  
Phys. Plasmas **21**, 084502 (2014)
56. Toroidal equilibrium states with reversed magnetic shear and parallel flow in connection with the formation of Internal Transport Barriers,  
Ap Kuiroukidis and G. N. Throumoulopoulos,  
J. Plasma Physics **81**, 905810404 (2015)
57. Comment on the paper 'An analytic functional form for characterization and generation of axisymmetric plasma boundaries' (2013 Plasma Phys. Control. Fusion 55 095009),  
Ap Kuiroukidis and G. N. Throumoulopoulos,  
Plasma Phys. Control. Fusion **57** , 078001 (2015)
58. Equilibria with incompressible flows from symmetry analysis,  
Ap Kuiroukidis, G. N. Throumoulopoulos,  
Phys. Plasmas **22**, 084502 (2015)
59. Vlasov tokamak equilibria with sheared toroidal flow and anisotropic pressure,  
Ap Kuiroukidis, G. N. Throumoulopoulos, and H. Tasso,  
Phys. Plasmas **22**, 082505 (2015)
60. On the equilibrium and stability of ITER relevant plasmas,  
Ap Kuiroukidis, G. N. Throumoulopoulos, H. Tasso,  
Energy and Environmental Engineering **3**, 56 (2015)

**Submitted for publication**

1. Extending HELENA to incompressible plasma rotation parallel to the magnetic field,



G. Poulipoulis, G. N. Throumoulopoulos, C. Konz and ITM-TF Contributors,  
submitted to Nucl. Fusion

2. Axisymmetric equilibria with pressure anisotropy and plasma flow,  
A. Evangelias, G. N. Throumoulopoulos,  
υπό συγγραφή

### **Publications in Conference Proceedings**

1. Fusile fuel trajectories of a fusion-fission symbiont with dynamical net core breeding gain, G. N. Throumoulopoulos and G. Pantis, Proceedings of the 4<sup>th</sup> International Conference on Emerging Nuclear Energy Systems, Madrid 1986, World Scientific 1987, p. 299
2. Ideal MHD compact toroidal configurations, G. N. Throumoulopoulos and G. Pantis, Proceedings of the 4<sup>th</sup> International Conference on Emerging Nuclear Energy Systems, Madrid 1986, World Scientific 1987, p. 125
3. Parabolomac: A spheromak type MHD equilibrium configuration, G. N. Throumoulopoulos and G. Pantis, 14<sup>th</sup> EPS Conference on Controlled Fusion and Plasma Physics, Madrid 1987, ECA **11D**, 503 (1987)
4. Analytic axisymmetric stationary states of a toroidal rotating plasma, G. N. Throumoulopoulos and G. Pantis, 1989 International Conference on Plasma Physics, New Delhi, Book of Abstracts (1989)
5. Axisymmetric force-free states and relaxation of a spheroidal spheromak, G. N. Throumoulopoulos and G. Pantis, IV Latin American Workshop on Plasma Physics, Buenos Aires 1990, Contributed papers, p. 211 (1990)
6. On relaxation of tokamak discharges with toroidal plasma rotation, G. N. Throumoulopoulos and G. Pantis, 1992 International Conference on Plasma Physics, Innsbruck, ECA **16C** Part I, 143 (1992)
7. Negative-energy waves in a magnetically confined guiding center plasma, G. N. Throumoulopoulos and D. Pfirsch, 20<sup>th</sup> EPS Conference on Plasma Physics and Controlled Fusion, Lisbon 1993, ECA **17C**, 1467 (1993)
8. Negative-energy perturbations in cylindrically symmetric equilibria within the framework of Maxwell-drift kinetic theory, G. N. Throumoulopoulos and D. Pfirsch, 21<sup>th</sup> EPS Conference on Plasma Physics and Controlled Fusion, Monttpelier 1994, ECA **18C**, 1390 (1994)

9. Stationary MHD equilibria of a cylindrical plasma with poloidal mass flow and arbitrary cross section shape, G. N. Throumoulopoulos, G. Pantis, 6<sup>th</sup> European Fusion Theory Conference, Utrecht 1995, Book of Program and Abstracts, P2-21 (1995)
10. Axisymmetric ideal magnetohydrodynamic equilibria with incompressible flows, H. Tasso and G. N. Throumoulopoulos 1998 International Sherwood Fusion Theory Conference, Atlanta, Book of Abstracts, 3C25 (1998)
11. Toroidal magnetohydrodynamic equilibria with incompressible flows, H. Tasso, G. N. Throumoulopoulos, 1998 International Congress on Plasma Physics & 25<sup>th</sup> EPS Conference on Controlled Fusion and Plasma Physics, ECA **22C**, 1895 (1998)
12. Helically symmetric ideal magnetohydrodynamic equilibria with incompressible flows, G. N. Throumoulopoulos, H. Tasso, 1999 Centennial Meeting of the American Physical Society, Atlanta 1999; Bulletin of the American Physical Society **44** Part I, 597 (1999)
13. Negative-energy perturbations and reversed-magnetic shear transport barriers in tokamaks, G. N. Throumoulopoulos, D. Pfirsch, 1999 Centennial Meeting of the American Physical Society, Atlanta 1999; Bulletin of the American Physical Society **44** Part I, 356 (1999)
14. On resistive magnetohydrodynamic tokamak equilibria with flow, G. N. Throumoulopoulos, H. Tasso, 8<sup>th</sup> European Fusion Theory Conference, Como 1999, Book of Program and Abstracts, OW-4 (1999)
15. Analytic magnetohydrodynamic equilibria of a magnetically confined plasma with incompressible flows, Ch. Simitzis, G. N. Throumoulopoulos, G. Pantis, H. Tasso, 27<sup>th</sup> EPS Conference on Controlled Fusion and Plasma Physics, Budapest 2000, ECA **24B**, 1569 (2000)
16. Magnetic dipole equilibrium of a gravitating plasma with incompressible flows, G. N. Throumoulopoulos, H. Tasso, 27<sup>th</sup> EPS Conference on Controlled Fusion and Plasma Physics, Budapest 2000, ECA **24B**, 656 (2000)
17. On Lyapunov stability of nonautonomous mechanical systems, H. Tasso, G. N. Throumoulopoulos, 42<sup>nd</sup> Annual Meeting of the APS Division of Plasma Physics and 10<sup>th</sup> International Congress on Plasma Physics, Québec 2000; Bulletin of the American Physical Society **45**, 297 (2000)
18. Tokamak equilibria with sheared flow, Ch. Simitzis, G. N. Throumoulopoulos, G. Pantis, H. Tasso, 2001 International Fusion Theory Conference, Santa Fe, Book of Abstracts, 3B25 (2001)
19. Wall stabilization and the Mathieu-Hill Equations, H. Tasso and G. N. Throumoulopoulos, 43<sup>rd</sup> Annual Meeting of the APS Division of Plasma Physics and American Physical Society, Long Beach 2000; Bulletin of the American Physical Society **46**, 104 (2001)

20. Tokamak equilibria with reversed magnetic shear and sheared flow,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso, 29<sup>th</sup> EPS Conference on Plasma Physics and Controlled Fusion, Montreux 2002, ECA **26B**, P-4.076 (2002)
21. Two-step control of wall mode and the monodromy matrix,  
H. Tasso, G. N. Throumoulopoulos, 44<sup>nd</sup> Annual Meeting of the APS Division of Plasma Physics, Orlando 2002; Bulletin of the American Physical Society **47**, 118 (2002)
22. On axisymmetric resistive MHD equilibria with flow free of Pfirsch-Schlüter diffusion,  
G. N. Throumoulopoulos, H. Tasso, 44<sup>nd</sup> Annual Meeting of the APS Division of Plasma Physics, Orlando 2002; Bulletin of the American Physical Society **47**, 254 (2002)
23. Ideal MHD equilibria, G. N. Throumoulopoulos, 1<sup>th</sup> School of Fusion Physics and Technology (SFPT) (2, Volos, 2002, Lecture notes, p. 207 (2003); 2<sup>th</sup> SFTP, Volos, 2003, Lecture notes, p. 270 (2004)
24. Tokamak equilibria with reversed magnetic shear and flow,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso, 1<sup>o</sup> School of Fusion Physics and Technology, Volos, 2002, Lecture notes, p. 263 (2003);
25. Two-fluid tokamak equilibria with reversed magnetic shear and sheared flow,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso, 2<sup>o</sup> SFPT, Volos, 2003, Lecture notes, p. 317 (2004); also 10<sup>th</sup> European Fusion Theory Conference, Helsinki 2003, Book of Abstracts, P1-9 (2003)
26. Two-step control of wall mode and the monodromy matrix,  
H. Tasso, G. N. Throumoulopoulos, 2<sup>o</sup> SFPT, Volos, 2003, Lecture notes, p. 327 (2004); also 5<sup>th</sup> International Congress on Industrial and Applied Mathematics, Sydney 2003; Book of Abstracts, ICL 03<sub>G</sub>0-34, p. 128 (2003)
27. Exact magnetohydrodynamic equilibria with flow and effects on the Shafranov shift,  
G. Poulipoulis, G. N. Throumoulopoulos, G. Pantis, H. Tasso, 5<sup>th</sup> International Congress on Industrial and Applied Mathematics, Sydney 2003; Book of Abstracts (supplementary information), ICL 10<sub>G</sub>-070, p. 11 (2003)
28. Hall-MHD axisymmetric equilibria with flow,  
G. N. Throumoulopoulos, H. Tasso, 2004 International Sherwood Fusion Theory Conference, Missoula, Book of Abstracts, 1E05 (2004)
29. Lyapunov stability of certain MHD systems, H. Tasso, G. N. Throumoulopoulos, 2004 International Sherwood Fusion Theory Conference, Missoula, Book of Abstracts, 2C12 (2004)
30. Multitoroidal configurations as equilibrium flow eigenstates,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso, 12<sup>th</sup> International Congress on Plasma Physics, Nice 2004, Book of Abstracts, p. 35 (2004)

31. Collisionless Maxwell-drift kinetic theory (in greek)  
G. N. Throumoulopoulos, 3<sup>th</sup> SFPT, Volos, 2004, Lectures (2004)
32. Axisymmetric equilibria with anisotropic resistivity and toroidal flow,  
G. Poulipoulis, G. N. Throumoulopoulos, H. Tasso, 47<sup>nd</sup> Annual Meeting of the APS Division of Plasma Physics, Denver 2005; Bulletin of the American Physical Society **50**, 350 (2005)
33. Elliptic and hyperelliptic magnetohydrodynamic equilibria,  
H. Tasso, G. N. Throumoulopoulos, 47<sup>nd</sup> Annual Meeting of the APS Division of Plasma Physics, Denver 2005; Bulletin of the American Physical Society **50**, 111 (2005)
34. Magnetohydrodynamics,  
G. N. Throumoulopoulos, 3<sup>th</sup> SFPT, Volos, 2004, Lectures (2004); 4<sup>th</sup> SFPT, Volos, 2005, Lectures (2005); 5<sup>th</sup> SFPT, Volos, 2006, Lectures (2006); Introduction to MHD (with stability) 6<sup>th</sup> SFPT, Volos, 2007, Lectures (2007); 7<sup>th</sup> SFPT, Volos, 2008, Lectures (2008); 9<sup>th</sup> SFPT, Volos, 2010, Lectures (2010); 10<sup>th</sup> SFPT, Volos, 2011, Lectures (2011);
35. Generalized Grad-Shafranov equation,  
G. N. Throumoulopoulos, 5<sup>th</sup> SFPT, Equilibrium Workshop, Volos, 2006, Lectures (2006)
36. On Hall magnetohydrodynamics equilibria,  
G. N. Throumoulopoulos, H. Tasso, 48<sup>th</sup> Annual Meeting of the APS Division of Plasma Physics, Philadelphia 2006; Bulletin of the American Physical Society **51**, 294 (2006)
37. On non-existence of tokamak equilibria with purely poloidal flow,  
G. N. Throumoulopoulos, H. Weitzner, H. Tasso, 48<sup>th</sup> Annual Meeting of the APS Division of Plasma Physics, Philadelphia 2006; Bulletin of the American Physical Society **51**, 354 (2006)
38. Side conditioned axisymmetric equilibria with incompressible flow,  
G. N. Throumoulopoulos, H. Tasso, G. Poulipoulis, 12<sup>th</sup> European Fusion Theory Conference, Madrid 2007 P2-13
39. On the existence of resistive magnetohydrodynamic equilibria,  
H. Tasso and G. N. Throumoulopoulos, 12<sup>th</sup> European Fusion Theory Conference, Madrid 2007 P2-12
40. A contribution to the equilibrium and stability of axisymmetric plasmas with field aligned flow, D. Apostolaki, G. N. Throumoulopoulos, H. Tasso, 7<sup>th</sup> SFPT, Volos, 2008, Lectures (2008); 35<sup>th</sup> EPS Conference on Plasma Physics, Crete, 9-13 June 2008, ECA **27**, P2-057 (2008)

41. A sufficient condition for the linear stability of magnetohydrodynamic equilibria with field aligned incompressible flows, G. N. Throumoulopoulos, H. Tasso, 35<sup>th</sup> EPS Conference on Plasma Physics, Crete, 9-13 June 2008, ECA **27**, P2-180 (2008)
42. Magnetohydrodynamic 'cat eyes' and stabilizing effects of plasma flow, G. N. Throumoulopoulos, H. Tasso, G. Poulipoulis, 4<sup>th</sup> International Conference on the Frontiers of Plasma Physics and Technology, Kathmandu, Nepal , 6-10 April 2009, p. 20
43. On MHD stability of gravitating plasmas with field aligned flow, H. Tasso, G. N. Throumoulopoulos, 52<sup>nd</sup> Annual Meeting of the APS Division of Plasma Physics, Chicago 2010; Bulletin of the American Physical Society **55**, 380 (2010)
44. Equilibrium nonlinearity and combined stabilizing effects of magnetic field and plasma flow, G. N. Throumoulopoulos, H. Tasso, G. Poulipoulis, 9<sup>th</sup> SFPT, Volos, 2010, Lectures (2010; 52<sup>nd</sup> Annual Meeting of the APS Division of Plasma Physics, Chicago 2010; Bulletin of the American Physical Society **55**, 151 (2010)
45. Extending HELENA to equilibria with flow, G. Poulipoulis, G. N. Throumoulopoulos, C. Konz, 10<sup>th</sup> SFPT, Volos, 2011, Lecture W2.3 (2011)
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### **Διδακτορική διατριβή**

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