

Curriculum Vitae

- Name: Minos Axenides
- Position: Deputy Director (2019 - present)
Director of Research (Researcher A), (2015 - present)
Institute of Nuclear & Particle Physics
N.C.S.R. Demokritos
Agia Paraskevi
153 10 Athens, Greece
- Previous Positions: 1997-2015 Principal Researcher (Researcher B with tenure)
Institute of Nuclear & Particle Physics
N.C.S.R. Demokritos
Agia Paraskevi
153 10 Athens, Greece
- 1994-1996 Visiting Professor
Dept. of Physics, University of Crete
Heraklion, Crete
- 1990-1994 Research Associate
Niels Bohr Institute, University of Copenhagen
Copenhagen, Denmark
- 1990-1992 Marie Curie European Union Fellow
- 1992-1994 Carlsberg Foundation Fellow
- 1987-1989 Research Associate
Dept. of Physics, University of Washington
Seattle, WA USA
- Military Service: Greek Air Force (1989-1990)
- Education: B.A. Physics and Mathematics (1976-1980)
Columbia College, Columbia University, USA
- M.A. Physics (1980-1982)
Harvard University, USA
- Ph.D. Theoretical Physics (1982-1986)
Harvard University, USA
Advisor: S. R. Coleman. Thesis: *Q-Balls*
- Awards: Gravity Research Foundation, (Boston MA)
3rd Annual Prize (1988)
- Grants:
- NATO grant for East-West Collaboration, 1991-1994 (20.000€)
 - Excellence Grant, GSRD (Physics with the CMS Experiment at the LHC)
75.000€ allocated to the INPP Theory Group of N.C.S.R. "Demokritos",
2002-2005
 - GSRT Grant ENTER2004 -04EP48, 2006-2008 (70.000€)
 - GSRT MIS-448332-ORASY KRIPIS, 2014-15 (30.000€)
- Research Interests: Fundamental Interactions in QFT, String and M-Theory, Astroparticle Physics
and Cosmology, Nonlinear Dynamics, Chaos and Complexity.

Senior Res. Associates: Prof. G. Pronko, 2004-2006 (Serpukhov & Dubna)

Post-Doctoral Associates: Dr. L. Perivolaropoulos, 1999-2002 (University of Ioannina)
Dr. A. Kehagias, January-September 2002 (NTUA)
Dr. K. Dimopoulos, 2004-2005 (University of Lancaster)
Dr. C. Kokorelis, 2005-2009 (Hellenic Open University)
Dr. G. Georgiou, 2010-present
Dr. G. Linardopoulos, 2015-present
Dr. K. Karamanos, 2016-present
Dr. G. Pastras, 2017-present

Ph.D. Theses: Z. Roupas, *Gravothermal Instabilities in the Presence of a Cosmological Constant* (2013)
G. Linardopoulos, *Rotating Strings and Membranes in the AdS/CFT Correspondence* (2015)
D. Katsinis, *Entanglement Entropy and Gravity* (ongoing)

Master Theses: P. Zaphiropoulos, *Parametric Resonance in Inflation* (2007)
G. Vasilogiannis, *Resonant Tunneling in Quantum Physics* (2008)
V. Papagrigoriou, *Topics in Quantum Entanglement* (ongoing)

Teaching Experience:

- University of Crete: Classical Mechanics, Quantum Mechanics, Astroparticle physics & Cosmology (1994-1997)
- N.C.S.R. “Demokritos”: Cosmology & Astroparticle Physics (2004-2005), Special Topics on Complex Systems (2009-present)

Journal Referee: European Physical Journal C, Physical Review Letters, Physical Review D, Physics Letters, Nuclear Physics B, Journal of Physics A, Reviews of Modern Physics (1990-present)

Committees: 2013, GSRT Scientific Program Evaluator
1999-2000, Research Committee, N.C.S.R. “Demokritos”
2003-2004 & 2006-2008, elected member of INP Advisory Committee, N.C.S.R. “Demokritos”

Chairman & Principal Organizer

COSA-Network: Principal Coordinator of the Greek Network on the Study of Complex Systems and Applications

Conferences:

1. *The Density Perturbation in The Universe*, 25-26 June 2004, NCSR Demokritos
2. IDM 2006, Sixth International Workshop on The Identification of Dark Matter, Rhodes Island, Greece.
3. FloratosFest 2014: New Horizons in Particles, Strings and Membranes, National & Kapodistrian University of Athens, Greece.
4. 2017 Athens Inter-institutional meeting in Theoretical High Energy Physics, National Center for Scientific Research “Demokritos”

Proceedings Editor:

1. M. Axenides, K. Dimopoulos, *The Density Perturbation in the Universe*, Nucl.Phys.Proc.Suppl. **148** (2005)
2. M. Axenides, G. Fanourakis, J. Vergados, *IDM 2006*. Proceedings of the 6th International Workshop on *the Identification of Dark Matter*, World Scientific, 2007.

Publications in Refereed International Journals

- [1] M. Axenides, E. Floratos, G. Linardopoulos, Phys.Rev., **D97** (2018), 126019
- [2] M. Axenides, E. Floratos, S. Nicolis, Eur.Phys.J., **C78** (2018) 412
- [3]. M. Axenides, E. Floratos, G. Linardopoulos, Phys.Lett. **B773** (2017) 265
- [4]. M. Axenides, E. Floratos, G. Linardopoulos, Nucl.Phys. **B907** (2016) 323
- [5]. M. Axenides, E. Floratos, S. Nicolis, Int.J.Mod.Phys. **D24** (2015), 1542012
- [6]. Z. Roupas, M. Axenides, G. Georgiou, E. Saridakis, Phys.Rev. **D89** (2014), 083002
- [7]. M. Axenides, E. Floratos, S. Nicolis, JHEP **1402** (2014) 109
- [8]. M. Axenides, E. Floratos, G. Linardopoulos, JHEP **1308** (2013) 089
- [9]. M. Axenides, G. Georgiou, Z. Roupas, Nucl.Phys. **B871** (2013) 21
- [10]. M. Axenides, G. Georgiou, Z. Roupas, Phys.Rev. **D86** (2012) 104005
- [11]. M. Axenides, E. Floratos, JHEP **1004** (2010) 036
- [12]. M. Axenides, E. Floratos, S. Nicolis, J.Phys. **A42** (2009) 275201
- [13]. M. Axenides, E. Floratos, JHEP **0902** (2009) 039
- [14]. M. Axenides, E. Floratos, JHEP **0703** (2007) 093
- [15]. M. Axenides, K. Dimopoulos, JCAP **0407** (2004) 010
- [16]. K. Dimopoulos, M. Axenides, JCAP **0506** (2005) 008
- [17]. M. Axenides, E. Floratos, C. Kokorelis, JHEP **0310** (2003) 006
- [18]. M. Axenides, E. Floratos, A. Kehagias, Nucl.Phys. **B662** (2003) 170
- [19]. M. Axenides, E. Floratos, L. Perivolaropoulos, Phys.Rev. **D66** (2002) 085006
- [20]. M. Axenides, L. Perivolaropoulos, Phys.Rev. **D65** (2002) 127301
- [21]. K. Anagnostopoulos, M. Axenides, E. Floratos, N. Tetradis, Phys.Rev. **D64** (2001) 125006
- [22]. M. Axenides, E. Floratos, L. Perivolaropoulos, Phys.Rev. **D64** (2001) 107901
- [23]. M. Axenides, E. Floratos, S. Komineas, L. Perivolaropoulos, Phys.Rev.Lett. **86** (2001) 4459
- [24]. M. Axenides, E. Floratos, L. Perivolaropoulos, JHEP **0011** (2000) 020
- [25]. M. Axenides, E. Floratos, L. Perivolaropoulos, Mod.Phys.Lett. **A15** (2000) 1541
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- [27]. M. Axenides, E. Floratos, G. Leontaris, N. Tracas, Phys.Lett. **B447** (1999) 67
- [28]. M. Axenides, E. Floratos, A. Kehagias, Phys.Lett. **B444** (1998) 190
- [29]. M. Axenides, L. Perivolaropoulos, T. Tomaras, Phys.Rev. **D58** (1998) 103512
- [30]. M. Axenides, L. Perivolaropoulos, M. Trodden, Phys.Rev. **D58** (1998) 083505
- [31]. M. Axenides, L. Perivolaropoulos, Phys.Rev. **D56** (1997) 1973

- [32]. M. Axenides, A. Johansen, H. B. Nielsen, Phys.Lett. **B396** (1997) 58
- [33]. A. Larsen, M. Axenides, Class.Quant.Grav. **14** (1997) 443
- [34]. M. Axenides, A. Johansen, H. B. Nielsen, O. Tornkvist, Nucl.Phys. **B474** (1996) 3
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- [45]. M. Axenides, A. Johansen, H. B. Nielsen, Nucl.Phys. **B414** (1994) 53
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- Other Publications (preprints, conference proceedings, theses)*
- [55]. M. Axenides, G. Georgiou, Z. Roupas, J.Phys.Conf.Ser. **410** (2013) 012130
- [56]. M. Axenides, E. Floratos, *Scaling Properties of the Lorenz System and Dissipative Nambu Mechanics*, Chaos, Information Processing and Paradoxical Games (2015) 27 [[arXiv:1205.3462](https://arxiv.org/abs/1205.3462)]
- [57]. M. Axenides, *Non Hamiltonian Chaos from Nambu Dynamics of Surfaces*, Chaos Theory: Modeling, Simulation and Applications (2011) 110 [[arXiv:1109.0470](https://arxiv.org/abs/1109.0470)]
- [58]. M. Axenides, G. Fanourakis, J. Vergados, Proceedings, 6th International Workshop on The Identification of Dark Matter (IDM 2006). Rhodes, Greece 2006
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- [61]. M. Axenides, *Bled Workshops Phys.* **2** (2002), 24 [[hep-ph/0111354](#)]
- [62]. M. Axenides, L. Perivolaropoulos, *Core Phase Transitions for Embedded Topological Defects*, ESF Scientific Network Meeting on Topological Defects. Grenoble 1997 [[hep-ph/9802395](#)]
- [63]. M. Axenides, L. Perivolaropoulos, *Domain Walls and Vortices with Nonsymmetric Core*, Particle Physics and the Early Universe Conference. Cambridge, England 1997 [[hep-ph/9706226](#)]
- [64]. M. Axenides, A. Johansen, H. B. Nielsen, O. Tornkvist, *Baryon Number Nonconservation and the Topology of Gauge Fields*, 9th Annual Divisional Meeting of the Division of Particles and Fields of the APS. Minneapolis, Minnesota 1996, [[hep-ph/9608456](#)]
- [65]. H. B. Nielsen, M. Axenides, A. Johansen, O. Tornkvist, *A $Z(2)$ Origin for $(B+L)$ Violation in the Hot Electroweak Theory*, International Europhysics Conference on HEP. Brussels, Belgium 1995 [[hep-ph/9509354](#)]
- [66]. M. Axenides, *On Global Anomalies with Yukawa Interactions*, 4th Hellenic School on Elementary Particle Physics. Corfu, Greece 1992
- [67]. G. Hinshaw, M. Axenides, *Large Separation Gravitational Lenses Amid The Cosmic Background*, DOE-ER-40423-06-P8, 1988
- [68]. M. Axenides, *Q Balls*, PhD Thesis, Harvard University, 1986