Curriculum Vitae
Ghassan Y. Antar

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American University of Beirut, P.O.Box 11-0236 / Physics Department, Riad El-Solh / Beirut 1107 2020, Lebanon. Email: ga40@aub.edu.lb

Employment
2007-to-date, Professor, the Physics Department, American University of Beirut
2006-2007, Visiting Scientist, Max-Planck Institut für Plasmaphysik, Garching, Germany
2000-2006. Research Scientist, University of California, San Diego, USA

Education
1994-1996, Ph.D. in Physics, Ecole polytechnique, France
1993, Diploma of Advanced Studies, Université Paris VI, France

Professional Data
Recipient of NATO scholarship in 1997.
2003, **Invited presentation to the International Conference on Plasma Science** (ICOPS),

Areas of Expertise
Neutral fluid dynamics, instabilities and turbulence, sub and supersonic gas dynamics. non-linear dynamical systems, chaos, and fractal theory, plasma dynamics, instabilities and turbulence, physics of controlled thermonuclear fusion.

Referee for International Journals, *Physics of Plasmas, Physical Review Letters, Plasma Physics and Controlled Fusion Nuclear Fusion.*

Selected Refereed journal articles

1. **G. Y. Antar**, P. Devynck, C. Fenzi, Phys. Plasmas **9**, 1255-1261 (2002).
2. **G. Y. Antar**, Contributions to Plasma Physics, **44**, 217-221 (2004).
3. **G. Y. Antar**, *et al*, Physics of Plasmas, **12**, 032506-032517 (2005).
4. **G. Y. Antar**, G. Counsell, J.-W. Ahn, Phys. Plasmas **12**, 082503-082514 (2005).
5. **G. Y. Antar**, Physics of Plasmas **13**, 052508-052516 (2006).
6. **G. Y. Antar**, J. Yu and G. Tynan, Phys. Plasmas **14** 022301 (2007).
7. L.R. Baylor, T.C. Jernigan, P.B. Parks, **G. Antar**, N.H. Brooks, S.K. Combs, D.T. Fehling, C.R. Foust, W.A. Houlberg, and G.L. Schmidt, *Nucl. Fusion* **47** 1598-1606 (2007).
8. J.H. Yu, C. Holland, G.R. Tynan, **G. Antar**, Z. Yan, Journal of Nuclear Materials, **363-365**, 728-732 (2007).
9. E. M. Hollmann, T. C. Jernigan, E. J. Strait, **G. Antar**, T. E. Evans, D. S. Gray, M. Groth, D. A. Humphreys, P. B. Parks, and D. G. Whyte, Phys. Plasmas **14**, 012502 (2007).
10. **G Y Antar**, M Tsalas, E Wolfrum, V Rohde, and the ASDEX Upgrade Team**,** Plasma Phys. Control. Fusion **50** 095012-095019 (2008).
11. **G.Y. Antar**, S.I. Krasheninnikov, P.B. Snyder, R.A. Moyer, R. Pugno, and D.S. Gray, *On the onset of type I edge localized modes*, Nucl. Fusion **49** 032001 (2009).
12. L. Moubarak and **G. Antar**, *Dynamics of a Two-Dimensional Flow Subject to Electromagnetic Forces*, Experiments in Fluids, **53**, 1627 (2012).

13. **G. Y. Antar**, M. Goniche, A. Ekedahl, L. Colas, *The Role of Power and Magnetic Connection to the Active Antenna in the suppression of Intermittent Structures by Ion Cyclotron Resonance Heating*, Nuclear Fusion **52**, 103005 (2012).
14. C. Habchi and **G. Antar**, *Direct numerical simulation of electromagnetically forced flows using OpenFOAM*, Computers & Fluids 116, 1-9 (2015).
15. C. Habchi and **G. Antar**. *The dynamics of two-dimensional turbulence excited at two scales using electromagnetic forces* Physics of Fluids, **28** 055102 (2016).
16. **G. Antar**, M. Goniche A. Ekedahl, A. Asghar and M. Zacek, *Turbulence decrease during lower hybrid current drive*, Physics Of Plasmas **24**, 032307 (2017).
17. **G. Antar**, A. Lalti and C. Habchi, *The generation of Non-axisymmetric vortices in Rotating Flows*, Phys. Fluids, 31, 074104 (2019).
18. **G. Antar**, A. Bahja, N. Metni, and C. Habchi, *The Effect of Adding an Axial Magnetic Field on the Expansion of a Laser-Produced Plasma*, Physics of Plasmas, **26**, 043515 (2019).
19. **G. Antar**, J. Ali, C. Madi, M. Noun, V. Rohde, M. Roumie, A. Said and J. Younes, *The properties of the tungsten coating on fine grain graphite using pulsed laser deposition*, Fusion Engineering, and Design, **148**, 111261 (2019).

Selected Administrative Responsibilities

- **Chairperson of the Physics Department, 2013-2016,** the Department has 11 full-time faculty members, about 200 undergraduate students, and about 50 graduate students. We deliver BS and MS in Physics and Ph.D. in Theoretical Physics.
- Member of the Core Lab Committee
- Member of the Undergraduate Research Experience grant