Mark Edelman's Curriculum Vitae

PERSONAL

Name: Mark Edelman
Address: 6629 Broadway, Apt. 4D
Riverdale, NY 10471
Home phone: (718) 796-2739 Cell: (646) 354-3994
E-mail: medelma1@yu.edu or edelman@cims.nyu.edu
Fax: (212) 995-4121
Office phone: (212) 340-7512
http://www.yu.edu/faculty/edelman/ or http://cims.nyu.edu/~edelman/

EDUCATION

1991 Ph.D. in Astrophysics
Title of thesis: Accretion shock waves in AM Her objects and cloud-cloud collisions,
Odessa University, Odessa, USSR

11. March 18-22, 2013; **APS March** [redacted] laryland
(http://meetings.aps.org/Meeting/ -family of

12. July 33-29, 2012**; International** [redacted] **ear Dynamics and Complexity;**
Shandong Normal University, Jin
(https://www.lhscientificpublishi C.aspx).
Keynote talk -

13. February 27 - March 2, 2012; **A** [redacted] oston, Massachusetts
(http://meetings.aps.org/Meeting/ alk (with Stern student Laura
Taieb):

14. June 30 July 2; 2011; **IDOTA2** [redacted] **ential Operators and Their**
Applications. **An International C** [redacted] **rofessor Stefan Samko,**
Aveiro, Portugal. (http://c2.glocos. [redacted] ntributed Talk (wit
Stern student Laura Taieb) al
equations".

15. July 25 Aug 8, 2011; **WCHAOS11:** [redacted]
Weak Chaos, Infinite Ergodic Theory, a
Institute for the Physics of Complex Systems, D
(http://www.pks.mpg.de/~wchaos11/).

16. July 13-20, 2010: **IV International Conference "Frontiers of Nonlinear Physics",**
organized by the Institute of Applied Physics, Russian Academy of Sciences, Nizhny
Novgorod, Russia. (http://www.fnp.sci-nnov.ru/venue.html). **Invited Talk**
Maps as Models of Fractional Dynamical Systems and

17. 28 - 31 July, 2010; **3rd Conference on Non Linear S**

PUBLICATIONS

Books edited:

M. Edelman, E. Macau, and M. A. F. Sanjuan (eds.), Chaotic, Fractional, and Complex Dynamics: New Insights and Perspectives; Series: Understanding Complex Systems, Springer, eBook, 2018, http://www.springer.com/us/book/9783319681085

Book Chapters:

1. M. Edelman, -law memory: direct introduction and Eulerian numbers, fractional maps, and fractional difference maps, in: A. Kochubei and Y. Luchko (eds.), *Handbook of Fractional Calculus with Applications, Volume 2, Theory,* De Gruyter, Berlin, 2018 (accepted).

2. -
(ed.), *Handbook of Fractional Calculus with Applications, Volume 2, Applications in Physics,* De Gruyter, Berlin, 2018 (accepted).

3. Sanjuan (eds.):Chaotic, Fractional, and Complex Dynamics: New Insights and Perspectives; Series: Understanding Complex Systems, 1 7, Springer, eBook, 2018.

4. M. Edelman, Universality in Systems with Power-Law Memory and Fractional Dynamics , in: M. Edelman, E. Macau, and M. A. F. Sanjuan (eds.): Chaotic, Fractional, and Complex Dynamics: New Insights and Perspectives; Series: Understanding Complex Systems, 147 171, Springer, eBook, 2018.

5. -law memor
, Conference on Chaos, Complexity and Transport 2015, Marseilles, France, 1 5 June 2015; X. Leoncini, C. Eloy, and G. Boedec (Editors), pp. 119-130 (World Scientific, Singapore, 2017). On-line http://www.worldscientific.com/doi/abs/10.1142/9789813202740_fmatter

6. aps with Power-
(Eds.), pp. 79-120 (Springer, New York, 2014); arXiv:1306.6361.

7. non-linear fractional differential
Theory: Advances and Applications, A. Almeida, L. Castro, F.-O. Speck (Eds.) pp. 139-155 (Springer, Basel, 2013); arXiv:1211.4012.

8. Problems in Nonlinear Science, Eds: E. Kaplan, J.E. Marsden, R.S. Katepalli, 421-443, (Springer, New York, 2003); arXiv:nlin/0112033.

Refereed Journals:

1.

16. G.M. Zaslavsky , P.N. Guzdar, M. Edelman
of solar wind-

17.
oscillators with long-range interaction: From synchronization to chaos
Chaos, 17, 043124 (2007); arXiv:0707.3941.

18. G.M. Zaslavsk in Chaos,

X. Leoncini, and G. Zaslavsky, 27-39, Marseille, France, 4-8 June 2007.

19. G.M. Zaslavsky, A.A. Stanislavsky, and M. Edelman, "Chaotic and pseudochaotic attractors of perturbed fractional oscillator", Chaos, 16, 013102 (2006); arXiv:nlin/0508018.

20.
Regular & Chaotic Dynamics 11, 329-336 (2006); arXiv:nlin/0511027.

21. A.S. Landsnman, S.A. Cohen, M. Edelman, G.M. Zaslavsky, "Resonance and chaotic trajectories in magnetic field reversed configuration", Commun. in Nonlin. Sci and Num. Sim. 10, 617, (2005).

22. G.M. Zaslavsky, B.A. Carreras, V.E. Lynch, L. Garcia, M. Edelman,

23. I.P. Smirnov, A.L. Virovlyansky, M. Edelman, and -
induced intensification of wave scatte 026206 (2005).

24.

25.

Mechaute, J.A. Tenreiro Machado, J.C. Trigeassou, J. Sabatier, 183-193,
Books on demand, Germany (2005).

30. S.V. Prants, M. Edelman, and G.M. Zaslavs atom
- hys. Rev. E 66, 046222 (2002);
arXiv:nlin/0210036.

31. G.M. Zaslavsky and M. Edelman
filamente , 11, 295 (2001).

32. G.M. Zaslavsky, M. Edelman, M., H. Weitzner, B. Carreras, G. McKee,
R. Bravenec, and R. Fonk -scale behavior of tokamak density
Phys. Plasmas, 7, 3691 (2000).

33. G.M. Zaslavsky and space and

34. G.M. Zaslavsky, M. Edelman, and B.A. Niyazov, -Similarity,
Renormalization, and Phase Space Nonuniformity of Hamiltonian Chaotic
159-181 (1997).

35. G.M. Zaslavsky and M. Edelman,
Phys. Rev. E 56, 5310-5320 (1997).

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