

Diego Fregolent Mendes de Oliveira, PhD
email: diegofregolente@gmail.com
mobile: +1(812)391-4762
homepage: diegofregolent.com

Social Data Science Center - SoDa
College of Information Studies (iSchool)
University of Maryland
College Park - MD - USA

Research Interests

Complex Networks Systems: Data analysis, data visualization, big data, data mining, machine learning, optimization, social network analysis, sentiment analysis, agent-based modeling, computational social science, information diffusion, modeling of dynamical processes on networks, online social media.

Chaos and Dynamical Systems, acting mainly on the following themes: nonlinear dynamics, dynamical systems, closed and open systems, scaling law, discrete maps, chaotic dynamics, conservative and dissipative systems, time-dependent systems, Fermi acceleration, billiards, kicked systems, chaotic and periodic attractors, bifurcations, boundary crisis.

Appointments

- **01/2022 - Present** Assistant Research Scientist
The Social Data Science Center - SoDa
College of Information Studies (iSchool)
University of Maryland - College Park - Maryland - USA.
- **08/2020 - 12-2021** Postdoctoral Research Associate
The Statistical and Applied Mathematical Sciences Institute
Program on Data Science in the Social and Behavioral Sciences
University of Department of Mathematics - North Carolina - Chapel Hill - NC
- **10/2017 - 08/2020** Research Scientist
US Army Research Laboratory and the Rensselaer Polytechnic Institute
- **03/2016 - 08/2017** Post-Doctoral Fellow at Northwestern University
Department of Chemical and Biological Engineering in the McCormick School of Engineering and Applied Science and the Northwestern Institute on Complex Systems (NICO) - Evanston -IL - USA.
- **04/2013 - 02/2016** Post-Doctoral Fellow at the Center for Complex Networks and Systems Research
School of Informatics and Computing - Indiana University, Bloomington - IN - USA.
- **02/2013 - 04/2013** - Visiting Scholar
State University of São Paulo – Rio Claro-SP – Brazil.
- **12/2011 - 12/2012** Post-Doctoral Fellow at the Institute for Multiscale Simulations
Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen - Germany.
Supervisor: Professor Dr. Thorsten Pöschel
- **08/2011 - 11/2011** - Visiting Researcher
Max Planck Institute for the Physics of Complex Systems - Dresden - Germany.
- **07/2009 - 01/2010** - Visiting Researcher
Max Planck Institute for Dynamics and Self-Organization - Göttingen - Germany.

Formal Education

- **10/2009 - 07/2012** - Doctor of Philosophy - Physics
Thesis Topic: *Statistical Properties of Time-dependent Systems*.
Advisor: Professor Dr. Marko Robnik
University of Maribor - Slovenia.
- **03/2008 - 07/2009** - Master of Science - Physics
Thesis Topic: *Time dependent billiards, A mechanism to suppress Fermi acceleration*.
Advisor: Professor Dr. Edson Denis Leonel
State University of São Paulo – Rio Claro-SP – Brazil.

- **02/2004 -12/2007** - Bachelor of Science - Physics
State University of São Paulo – Rio Claro-SP – Brazil.
- **02/2004 - 12/2007** - Physics Teacher
State University of São Paulo – Rio Claro-SP – Brazil.

Honors and Awards

- 2013 - Postdoctoral Fellowship - supported by James S. McDonnell Foundation - 34 months;
- 2011 - Postdoctoral Fellowship - Deutsche Forschungsgemeinschaft through the Cluster of Excellence Engineering of Advanced Materials - 13 months;
- 2009 - Doctoral Fellowship - Javni sklad RS za razvoj kadrov in stipendije - Ad Futura - 3 years;
- 2009 - Internship - Ludwig Prandtl Fellowship at Max Planck Institute for Dynamics and Self-Organization - 6 months;
- 2008 - Master Fellowship - Fundação de Amparo à Pesquisa do Estado de São Paulo - 18 months;
- 2005 - Undergraduate Fellowship - Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq - 24 months;

Skills

- **Programming:** Python, Fortran, R. • **Main Tools:** Notebooks, Matplotlib, scikit-learn, numpy, pandas, networkx, scipy, ggplot2, JSON, XML among others.

Publication List

The number of citations can be found in my Google Scholar at bit.ly/dfmo_citations

Under Review

1. N. Xiao, D. F. M. Oliveira *Gender Disparities in Academic Radiology: A 13-Year Review*. Under Review - Radiology, 2022.
2. G. L. Ciampaglia, M. Tambuscio, D. F. M Oliveira, G. Ruffo, A. Flammini, F. Menczer *Understanding the spread of misinformation over online social networks*. In Progress, 2022.
3. D. F. M. Oliveira, K. S. Chan, *Quantifying differences in US and Russian news propagation in online social media*. In Progress, 2022.
4. D. F. M. Oliveira, K. S. Chan, Brian Uzzi *Quantifying Gender Disparities in Economics Research*. Under Review - PNAS, 2022.
5. D. F. M. Oliveira, Kevin S. Chan *Message sorting: a mechanism that hinders the system's discriminative power*. Under Review - IEEE - Transactions on Network Science and Engineering, 2022.

Published

6. Hongjia H. Chen, Tristram J. Alexander, Diego F.M. Oliveira and Eduardo G. Altmann *Scaling laws and dynamics of hashtags on Twitter*. **Chaos**, vol. 30, 063112, 2020.
7. T. K. Woodruff, D. F. M Oliveira, Y. Ma, *Sex Differences in Grant Funding*. **JAMA - The Journal of the American Medical Association**, vol. 322, p. 578-580, 2019.
8. D. F. M Oliveira, Y. Ma, T. K. Woodruff, B. Uzzi, *Comparison of National Institutes of Health Grant Amounts to First-Time Male and Female Principal Investigators*. **JAMA - The Journal of the American Medical Association**, vol. 321, p. 898-900, 2019.

9. Y. Ma, D. F. M Oliveira, T. K. Woodruff, B. Uzzi, *Women who win prizes get less money and prestige.* **Nature**, vol. 565, p. 287-288, 2019.
10. D. F. M. Oliveira, K. S. Chan, *The effects of trust and influence on the spreading of low and high quality information.* **Physica A: Statistical Mechanics and its Applications**, vol. 525, p. 657-663, 2019.
11. D. F. M. Oliveira, K. S. Chan, *Diffusion of Information in an Online Social Network with Limited Attention.* **Information & Security** vol. 43, p. 362-374, 2019.
12. P. Cisneros-Velarde, D. F. M. Oliveira, K. S. Chan, *Spread and control of misinformation with heterogeneous agents,* **Complex Networks X**, p. 75-83, 2019.
13. E. Ciftcioglu, R. Hardy, K. Chan, L. Scott, D.F.M. Oliveira, G. Verma, *Chaff Allocation and Performance for Network Traffic Obfuscation.* **38th IEEE International Conference on Distributed Computing Systems, 2018**, p. 1565-1568, 2018.
14. D. F. M. Oliveira, K. S. Chan, Edson D. Leonel *Scaling Invariance in a Social Network with Limited Attention and Innovation.* **Physics Letters A**, vol. 382, p. 3376-3380, 2018.
15. N. Xiao, D. F. M. Oliveira, R. Gupta, *Characterizing the Impact of Women in Academic Interventional Radiology - a 12 year analysis.* **Journal of Vascular and Interventional Radiology**. vol. 29, p. 1553-1557, 2018.
16. M. Tambuscio, D. F. M Oliveira, G. L. Ciampaglia, G. Ruffo, *Network segregation in a model of misinformation and fact-checking.* **Journal of Computational Social Science** ,vol. 1, p. 261-275,2018
17. N. Xiao, N. A. Mansukhani, D. F. M Oliveira, M. R. Kibbe MR, *Association of Author Gender With Sex Bias in Surgical Research.* **JAMA Surgery**, vol. 1, p. 663-670,2018
18. X. Qiu*, D. F. M. Oliveira*, A. Flammini, F. Menczer *Limited individual attention and online virality of low-quality information.* **Nature Human Behaviour**, vol.1, p.1-7, 2017. (* The authors contributed equally to the paper.)
19. Marcus Vinícius Camillo Galia, D. F. M. Oliveira, Mario R. Silva, E. D. Leonel, *Evolution to the equilibrium in a dissipative and time dependent billiard.* **Physica A**, vol.465, p.66–74, 2017.
20. Edson D. Leonel, Marcus Vimcius Camillo Galia, Luis Antonio Barreiro, D. F. M. Oliveira, *Thermodynamics of a time dependent and dissipative oval billiard: a heat transfer and billiard approach.* **Phys. Rev. E**, v.94, p.062211(1-10), 2016.
21. D. Nikolov, D. F. M. Oliveira, A. Flammini, F. Menczer *Measuring online social bubbles.* **Peerj Computer Science**, vol. 1, p.e38, 2015.
22. D. F. M. Oliveira, Mario R. Silva, E. D. Leonel, *A symmetry break in energy distribution causing unlimited diffusion in a two dimensional mapping.* **Physica A**, vol.15, p.909–915, 2015.
23. D. F. M. Oliveira, E. D. Leonel, *Statistical and dynamical properties of a dissipative kicked rotator.* **Physica A**, vol. 413, p.498–514, 2014.
24. M. Hansen, D. R. Costa, D. F. M. Oliveira, E. D. Leonel, *Statistical properties for a dissipative model of relativistic particles in a wave packet: a parameter space investigation.* **Applied Mathematics and Computation**, vol. 1, p.387–392, 2014.
25. D. R. Costa, D. F. M. Oliveira, E. D. Leonel, *Dynamical and statistical properties of a rotating oval billiard.* **Communications in Nonlinear Science and Numerical Simulations**, vol. 19, p.1926–1934, 2014.
26. D. F. M. Oliveira, Pöschel, T., *Competition between unlimited and limited energy growth in a two-dimensional time-dependent billiard.* **Phys Lett A**, vol.337, p. 2052-2057, 2013.
27. D. F. M. Oliveira, E. D. Leonel, *Some dynamical properties of a classical dissipative bouncing ball model with two nonlinearities.***Physica A**, vol.392, p. 1762-1769, 2013.
28. D. F. M. Oliveira, E. D. Leonel, *Dynamical properties for the problem of a particle in a electric field of wave packet: low velocity and relativistic approach,* **Phys. Lett. A**, v.376 p.3630-3637, 2012.
29. O. Georgiou, G. Gligorić, A. Lazarides, D. F. M. Oliveira, J. D. Bodyfelt, A. Goussev, *Influence of boundary conditions on quantum escape.* **Europhys. Lett.**, v.100, p.20005(1-6) 2012.

30. D. F. M. Oliveira, M. Robnik *Scaling invariance in a time dependent elliptical billiard*. **International Journal of Bifurcation and Chaos**, v.22, p.1250207, 2012.
31. D. F. M. Oliveira, E. D. Leonel *In-flight and collisional dissipation as a mechanism to suppress Fermi acceleration in a time-dependent Lorentz Gas*. **Chaos**, v.22, p.026123 2012.
32. D. F. M. Oliveira, M. Robnik, E. D. Leonel *Statistical properties of a dissipative kicked system: critical exponents and scaling invariance*. **Phys. Lett. A**, v.376 p.723-728, 2012.
33. D. F. M. Oliveira, E. D. Leonel *Parameter-space for a dissipative Fermi-Ulam model*. **New J. of Physics**, v.13 p.123012(1-13), 2011.
34. D. F. M. Oliveira, M. Robnik, E. D. Leonel *Shrimp-shape domains in a dissipative kicked rotator*. **Chaos**, v.21, p.043122(1-6), 2011.
35. D. F. M. Oliveira, M. Robnik, E. D. Leonel *Dynamical properties of a particle in a wave packet: scaling invariance and boundary crisis*. **Chaos, Solitons & Fractal**, v.44, p.883-890, 2011.
36. D. F. M. Oliveira, E. D. Leonel, M. Robnik, *Boundary crisis and transient in a dissipative relativistic standard map*. **Phys. Lett. A**, v.375, p.3365-3369, 2011.
37. D. F. M. Oliveira, M. Robnik *In-flight dissipation as a mechanism to suppress Fermi acceleration*. **Phys. Rev. E**, v.83, p.026202(1-5), 2011.
38. D. F. M. Oliveira, J. Vollmer, E. D. Leonel *Fermi acceleration and suppression of Fermi acceleration in a time-dependent Lorentz gas*. **Physica D**, v.240, p.389-396, 2011.
39. D. F. M. Oliveira, E. D. Leonel *Boundary crisis and suppression of Fermi acceleration in a dissipative two dimensional non-integrable time-dependent billiard*. **Physics letters A**, v.374, p.3016-3020, 2010.
40. D. F. M. Oliveira, E. D. Leonel *Suppressing Fermi acceleration in a two-dimensional non-integrable time-dependent oval-shaped billiard with inelastic collisions*. **Physica A**, vol.389, p.1009-1020, 2010.
41. D. F. M. Oliveira, E. D. Leonel *On the Dynamical Properties of an Elliptical-Oval Billiard with Static Boundary*. **Communications in Nonlinear Science and Numerical Simulations**, v.15, p.1092-1102, 2010.
42. E. D. Leonel, D. F. M. Oliveira, A. Loskutov *Fermi acceleration and scaling properties of a time dependent oval billiard*. **Chaos**, v.19, p.033142(1-7), 2009.
43. D. F. M. Oliveira, R. A. Bizão, E. D. Leonel *Scaling Properties of a Hybrid Fermi-Ulam-Bouncer Model*. **Mathematical Problems in Engineering**, v.2009, p.1-14, 2009.
44. D. F. M. Oliveira, E. D. Leonel *The Feigenbaum's δ for a high dissipative bouncing ball model*. **Brazilian Journal of Physics**, v.38, p.62-64, 2008.
45. E. D. Leonel, D. F. M. Oliveira, R. E. Carvalho *Scaling properties of the regular dynamics for a dissipative bouncing ball model*. **Physica A**, v.386, p.73-78, 2007.

Conference Proceedings

46. D. F. M. Oliveira, E. D. Leonel *A two-dimension non-integrable billiard under scaling*. 9th Brazilian Conference on Dynamics, Control and Their Applications - Dincon, v.1, p. 1 - 6, Serra Negra - SP, 2010.
47. D. F. M. Oliveira, A. Loskutov, E. D. Leonel *Dinâmica de uma partícula clássica em um bilhar bidimensional com fronteira dependente do tempo*. In: 8th Brazilian Conference on Dynamics, Control and Their Applications - Dincon, v.1, p. 1 - 6, Bauru - SP, 2009.
48. D. F. M. Oliveira, E. D. Leonel *Dinâmica de uma partícula clássica em um bilhar bidimensional*. In: 7th Brazilian Conference on Dynamics, Control and Their Applications - Dincon, v.1, p. 486 - 491, Presidente Prudente - SP, 2008.
49. D. F. M. Oliveira, E. D. Leonel *Scaling Analysis on the Simplified Hybrid Fermi-Ulam-bouncer Model* In: 6th Brazilian Conference on Dynamics, Control and Their Applications - Dincon, v.1. p.1096 - 1101, São José do Rio Preto - SP, 2007.
50. D. F. M. Oliveira, R. E. Carvalho, E. D. Leonel *What can a damping coefficient do in a bouncing ball model?* In: 5th Brazilian Conference on Dynamics, Control and Their Applications - Dincon, Guaratinguetá - SP, 2006.

Expanded Abstract

1. D. F. M. Oliveira, E. D. Leonel *Propriedades Dinâmicas do Modelo Fermi-Ulam Dissipativo*, Presidente Prudente-SP. Anais do XIX CIC UNESP, 2007.
2. D. F. M. Oliveira, E. D. Leonel, R. E. Carvalho *Eventos de crises no modelo Fermi-Ulam dissipativo*, Bauru-SP. Anais do XVIII CIC UNESP, 2006.

Teaching experience

- **2011-2012:** Friedrich-Alexander Universität Erlangen-Nürnberg - tutor: Computeranwendungen in der Verfahrenstechnik 2.

Membership

- **2017-:** Network Science Society.

Conferences Program Committee

- 2020 - Data Science in the Social and Behavioral Sciences Workshop at The Statistical and Applied Mathematical Sciences Institute, North Carolina - USA.
- 2018 - 3rd international conference “Digital Transformation & Global Society” (DTGS’18) - St. Petersburg, Russia.
- 2018 - 10th International Conference on Social Informatics (SocInfo) to St.Petersburg, Russia.
- 2018 - International Conference on Computational Social Science - IC^2S^2 - Evanston - Illinois - USA.
- 2017 - 9th International Conference on Social Informatics - Oxford - UK.
- 2017 - NetSci 2017 - International School and Conference on Network Science 2017 Indianapolis - Indiana - USA.
- 2016 - 8th International Conference on Social Informatics - Seattle - Washington - USA.
- 2016 - International Conference on Computational Social Science - IC^2S^2 - Evanston - Illinois - USA.
- 2015 - International Conference on Computational Social Science - IC^2S^2 - Helsinki - Finland.

Scientific Journal Referee

I am a regular reviewer for the following journals:

- 10th International Conference on Social Media & Society, Toronto, Canada.
- Communications in Nonlinear Science and Numerical Simulations;
- Information Resources Management Journal (IRMJ).
- Journal of Physics A: Mathematical and Theoretical.
- Discrete Dynamics in Nature and Society;
- Applied Mathematics and Computation;
- Mathematical Problems in Engineering;
- Communications of the ACM;
- Chaos, Solitons & Fractals;
- Technology in Society;
- Physics Letters A;
- Physica Scripta;

- PLOS ONE;
- Physica A;
- Chaos;

Research Work Presented in Workshop, Seminars, Conference and Meetings

1. D. F. M. Oliveira, *Competition and spreading of low and high quality information in online social networks*. Data Science in the Social and Behavioral Sciences Workshop at The Statistical and Applied Mathematical Sciences Institute, 2020, North Carolina - USA.
2. D. F. M. Oliveira, Kevin S. Chan, *Competition and spreading of low and high quality information in online social networks*. In: NetSci X - International School and Conference on Network Science, 2020, Tokyo - Japan.
3. D. F. M. Oliveira, Kevin S. Chan, *Competition and spreading of low and high quality information in online social networks*. In: The Conference on Complex Systems (CCS), 2019, Singapore.
4. D. F. M. Oliveira, Kevin S. Chan, *Sorting information by quality as a mechanism to hinder the system's discriminative power*. In: 5th International Conference on Computational Social Science IC2S2, 2019, Amsterdam - The Netherlands.
5. D. F. M. Oliveira, Kevin S. Chan, *Competition and spreading of low and high quality information in online social networks*. In: NetSci - International School and Conference on Network Science, 2019, Burlington - VT, USA.
6. D. F. M. Oliveira, Kevin S. Chan, *Sorting information by quality as a mechanism to hinder the system's discriminative power*. In: The conference is CompleNet 2019, the 10th Annual Conference on Complex Networks, 2019, Tarragona, Spain
7. D. F. M. Oliveira, Kevin S. Chan, *Sorting information by quality as a mechanism to hinder the system's discriminative power*. In: Seventh Int. Conference on Complex Networks & Their Applications, 2018, Cambridge, UK.
8. D. F. M. Oliveira, Kevin S. Chan, *Competition and spreading of low and high quality information in online social networks*. In: NetSci - International School and Conference on Network Science, 2018, Paris, France.
9. D. F. M. Oliveira, X. Qiu, A. S. Shirazi, A. Flammini, F. Menczer, *Limited individual attention and virality of low-quality information in online social networks*. In: NetSciX - International School and Conference on Network Science, 2018, Hangzhou, China.
10. N. Xiao, N. Mansukhani, D. F. M. Oliveira, M. Kibbe, *The Effect of Author Gender on Sex Bias in Surgical Research*. 13th annual academic surgical congress, Jacksonville - Florida, 2018.
11. D. F. M. Oliveira, X. Qiu, A. S. Shirazi, A. Flammini, F. Menczer, *Tradeoff between information quality and diversity in online social networks*. In: NetSci - International School and Conference on Network Science, 2017, Indianapolis, Indiana.
12. D. F. M. Oliveira, B. Uzzi, *The Anatomy of Medicine: A tale of a gender gap and how our network affects our success*. In: NetSci - International School and Conference on Network Science, 2017, Indianapolis, Indiana.
13. D. F. M. Oliveira, *Parameter-space for a dissipative Fermi-Ulam model*. In: 10th Christmas Symposium of Physicists, 2011, Maribor, Slovenia. v.1. p.31 - 31.
14. D. F. M. Oliveira, M. Robnik, E. D. Leonel *Statistical properties of time-dependent systems*. In: 8th International Summer School/Conference Let's Face Chaos Through Nonlinear Dynamics, 2011, Maribor - Slovenia. v.1. p.76 - 76.
15. D. F. M. Oliveira, J. Vollmer, E. D. Leonel *Fermi acceleration and its suppression in a time-dependent Lorentz gas*. In: 8th International Summer School/Conference Let's Face Chaos Through Nonlinear Dynamics, 2011, Maribor - Slovenia. v.1. p.85 - 85.
16. D. F. M. Oliveira, *Fermi acceleration and its suppression in a time-dependent Lorentz gas*. In: International School-Conference. Mathematics and Physics of Billiard-Like Systems - Billiards'11, 2011, Ubatuba - São Paulo - Brazil. International School-Conference. Mathematics and Physics of Billiard-Like Systems - Billiards'11, 2011. v.1. p.38 - 39.

17. D. F. M. Oliveira, M. Robnik *In-flight dissipation as a mechanism to suppress Fermi acceleration*. In: 9th Christmas Symposium of Physicists, 2010, Maribor, Slovenia. v.1. p.47-48.
18. D. F. M. Oliveira, *Fermi acceleration and suppression of Fermi acceleration in a two-dimensional Billiard*. In: The 13th Slovenia-Japan seminar on nonlinear science and Waseda AICS symposium on nonlinear and nonequilibrium phenomena in complex systems, 2010, Tokyo, Japan.
19. D. F. M. Oliveira, J. Vollmer, E. D. Leonel *Fermi acceleration and suppression of Fermi acceleration in a time-dependent Lorentz Gas*. In: Nonlinear Dynamics and Complexity: Theory, Methods and Applications, 2010, Thessalonki, Greece. v.1. p. 32-32
20. D. F. M. Oliveira, E. D. Leonel, A. Loskutov *Fermi acceleration, Suppression of Fermi acceleration and scaling in a two-dimensional non-integrable time-dependent billiard*. In: 8th Christmas Symposium of Physicists, 2009, Maribor, Slovenia. v.1. p.21 - 22.
21. D. F. M. Oliveira, E. D. Leonel, A. Loskutov *On The Dynamical Properties of an time-dependent Oval Billiard*. In: Dynamics Days Europe, 2009, Goettingen, Germany. v.1. p.43 - 44.
22. D. F. M. Oliveira, E. D. Leonel, A. Loskutov *A Time-dependent Oval billiard*. In: XXXII Encontro Nacional de Física da Matéria Condensada, 2009, Águas de Lindóia. v.1. p.52 - 52.
23. D. F. M. Oliveira, E. D. Leonel, A. Loskutov *Fermi Acceleration in a Time-dependent oval Billiard*. In: XXXII Encontro Nacional de Física da Matéria Condensada, 2009, Águas de Lindóia. v.1. p.52 - 52.
24. D. F. M. Oliveira, E. D. Leonel *On the Dynamical Properties of an Oval Billiard*. In: XXXII Encontro Nacional de Física da Matéria Condensada, 2009, Águas de Lindóia. v.1. p.52 - 52.
25. E. D. Leonel, D. F. M. Oliveira, A. Loskutov *Fermi Acceleration in a Time Dependent Billiard With Oval Shape*. In: International Workshop “Advanced Techniques in Nonlinear Dynamics”, 2009, Peubla, Mexico. International Workshop “Advanced Techniques in Nonlinear Dynamics”, 2009. v.1. p.38 - 38.
26. D. F. M. Oliveira, E. D. Leonel *Dynamical Properties of an Oval Billiard*. In: International Workshop “Advanced Techniques in Nonlinear Dynamics”, 2009, Peubla, Mexico. International Workshop “Advanced Techniques in Nonlinear Dynamics”, 2009. v.1. p.39 - 39.
27. E. D. Leonel, D. F. M. Oliveira, A. Loskutov *Fermi Acceleration in a Time Dependent Oval Billiard*. In: First International School-Conference. Mathematics and Physics of Billiard-Like Systems - Billiards’09, 2009, Águas de Lindóia. First International School-Conference. Mathematics and Physics of Billiard-Like Systems - Billiards’09, 2009. v.1. p.48 - 48.
28. D. F. M. Oliveira, E. D. Leonel *On The Dynamical Properties of an Oval Billiard*. In: First International School-Conference. Mathematics and Physics of Billiard-Like Systems - Billiards’09, 2009, Águas de Lindóia. First International School-Conference. Mathematics and Physics of Billiard-Like Systems - Billiards’09, 2009. v.1. p.49 - 49.
29. E. D. Leonel, D. F. M. Oliveira, A. Loskutov *Aceleração de Fermi no Bilhar Ovóide Dependente do Tempo*. In: XIV Colóquio Brasileiro de Dinâmica Orbital, 2008, Águas de Lindóia. Anais do XIV Colóquio Brasileiro de Dinâmica Orbital. , 2008. v.1. p.86 - 86.
30. D. F. M. Oliveira, E. D. Leonel *O Bilhar Elíptico-ovóide e suas Propriedades Dinâmicas* In: XIV Colóquio Brasileiro de Dinâmica Orbital, 2008, Águas de Lindóia. Anais do XIV Colóquio Brasileiro de Dinâmica Orbital. , 2008. v.1. p.85 - 85.
31. R. A. Bizão, E. D. Leonel, D. F. M. Oliveira, *Análise de Escala para o modelo Fermi-Ulam-bouncer Híbrido* In: XVI Jornada De Iniciação científica e Tecnológica - UFScar, 2008, São Carlos. Livro de resumos da XVI Jornada De Iniciação científica e Tecnológica - UFScar, 2008.
32. D. F. M. Oliveira, E. D. Leonel *Propriedades dinâmicas do bilhar elíptico-ovóide*. In: XXXI Congresso Paulo Leal Ferreira de Física, 2008, São Paulo. Anais do XXXI Congresso Paulo Leal Ferreira de Física. 2008. v.1. p.2-3.
33. D. F. M. Oliveira, E. D. Leonel *Invariância de escala no modelo híbrido de acelerador de Fermi* In: XXXI Encontro Nacional de Física da Matéria Condensada, 2008, Águas de Lindóia. Livro de Resumos do XXXI Encontro Nacional de Física da Matéria Condensada. 2008. v.1. p.39-39.

34. D. F. M. Oliveira, R. E. Carvalho, E. D. Leonel *Algumas Propriedades dinâmicas do modelo Bouncing Ball* In: XXX Encontro Nacional de Física da Matéria Condensada, 2007, São Lourenço-MG. XXX Encontro Nacional de Física da Matéria Condensada - Livro de resumos. Sociedade Brasileira de Física, 2007. v.1. p.40 - 40.
35. D. F. M. Oliveira, E. D. Leonel *Análise de Escala no Modelo Fermi-Ulam-Bouncer Híbrido* In: XXX Encontro Nacional de Física da Matéria Condensada, 2007, São Lourenço-MG. XXX Encontro Nacional de Física da Matéria Condensada - Livro de resumos. Sociedade Brasileira de Física, 2007. v.1. p.40-40.
36. D. F. M. Oliveira, E. D. Leonel *Crises, bifurcações e propriedades de escala no modelo bouncing ball dissipativo*. In: XXX Congresso Paulo Leal Ferreira de Física, 2007, São Paulo. Anais do XXX Congresso Paulo Leal Ferreira de Física. 2007. v.1. p.5-6.
37. D. F. M. Oliveira, E. D. Leonel *Dynamics Properties of a Simplified Hybrid Fermi-Ulam-Bouncer Model* In: II Encontro Nacional de Física Teórica e Computacional, 2007, São Paulo. Livro de Resumos do II Encontro Nacional de Física Teórica e Computacional. 2007.
38. D. F. M. Oliveira, E. D. Leonel *O Modelo Fermi-Ulam e Suas Propriedades Dinâmicas* In: 15^o Simpósio Internacional de Iniciação Científica da USP, 2007, São Carlos. Anais do 15^a Simpósio Internacional de Iniciação científica da USP. 2007.
39. D. F. M. Oliveira, E. D. Leonel *On the Scaling Behavior of a Simplified Hybrid Fermi-Ulam-bouncer model* In: V Brazilian Meeting on Simulational Physics, 2007, Ouro Preto - Mg. V Brazilian Meeting on Simulation Phisys. 2007.
40. D. F. M. Oliveira, E. D. Leonel *Propriedades de Escala para o Modelo Híbrido Simplificado*. In: VII Jornada Científica da UFSCar, XV Congresso de Iniciação Científica, 2007, São Carlos. Anais de Eventos da UFSCar. 2007. v.3. p.569 - 569.
41. D. F. M. Oliveira, R. E. Carvalho, E. D. Leonel *Crises e Propriedades de Escala no Modelo Bouncing Ball*. In: XIII Colóquio Brasileiro de Dinâmica Orbital., 2006, Bertogá. Livro de Resumos do XIII Colóquio Brasileiro de Dinâmica Orbital. 2006. (Portuguese)
42. D. F. M. Oliveira, R. E. Carvalho, E. D. Leonel *Determinação das variedades estáveis e instáveis no modelo Bouncing Ball com colisões inelásticas* In: XXIX Encontro Nacional de Física da Matéria Condensada, 2006, São Lourenço - MG. XXIX Encontro Nacional de Física da Matéria Condensada - Programa e Resumos. Sociedade Brasileira de Física, 2006. v.1. p.42-42.
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Technical Production

1. D. F. M. Oliveira (participant), *Information Disorder Machines - Weaponizing Narrative and the Future of the United States of America*, 2019. (Technical Report by Brian David Johnson From 2019 Threatcasting Workshop hosted at Arizona State University produced by Cyndi Coon).
2. D. F. M. Oliveira, E. D. Leonel, *Dynamics and statistical properties of time-dependent systems.*, 2013. (Research Report - FAPESP)
3. D. F. M. Oliveira, E. D. Leonel, *Bilhares Dependentes do Tempo: Um Mecanismo para Suprimir Aceleração de Fermi.*, 2009. (Research Report)
4. D. F. M. Oliveira, E. D. Leonel, *Análise de Séries Temporais e Propriedades de Escala no Modelo Fermi-Ulam-bouncer Híbrido*, 2007. (Research Report).
5. D. F. M. Oliveira, E. D. Leonel, *Determinação das variedades estáveis e instáveis no modelo Fermi-Ulam dissipativo*, 2006. (Research Report - Final).
6. D. F. M. Oliveira, E. D. Leonel, *Determinação das variedades estáveis e instáveis no modelo Fermi-Ulam dissipativo*, 2006. (Research Report - Partial).

Grants

- “A multidimensional bibliometric tool to measure scientific impact”, National Science Foundation (\approx \$1.5M), PI: Prof. Dr. Luis A. N. Amaral. 2016.
- “Socio-technical factors affecting the spread of misinformation”, National Science Foundation (\approx \$1.2M), PI: Prof. Dr. Filippo Menczer and Prof. Dr. Alessandro Flammini. 2016.
- “Statistical and dynamical properties of time-dependent systems”, Fundação de Amparo à Pesquisa do Estado de São Paulo - FAPESP (\approx \$10.000), Visiting Researcher for two months at State University of São Paulo, 2013.

Press Coverage

Our paper Comparison of National Institutes of Health Grant Amounts to First-Time Male and Female Principal Investigators was featured in:

1. 03/05/19 – Northwestern Now – Women scientists get less federal funding than men by Marla Paul.
2. 03/05/19 – The New York Times: Another Obstacle for Women in Science: Men Get More Federal Grant Money by Andrew Jacobs.
3. 03/05/19 – EurekaAlert!: Women scientists get less federal funding than men by Marla Paul.
4. 03/05/19 – Medical Xpress: Women scientists get less federal funding than men, new study finds by Northwestern University.
5. 03/05/19 – Chicago Tribune: Female scientists receive on average about \$40,000 less in federal funding by Alison Bowen.
6. 03/05/19 – Reuters: Female scientists get smaller first-time grants than men by Lisa Rapaport.
7. 03/06/19 – Crain’s Chicago Business: Female scientists get less federal funding than men by Stephanie Goldberg.
8. 03/06/19 – Genome Web: New Female, Male PIs Receive Differing Grant Amounts.
9. 03/06/19 – Chanel News Asia: Female scientists get smaller first-time grants than men.
10. 03/06/19 – Lab Manager: Women Scientists Get Less Federal Funding Than Men by Northwestern University.
11. 03/06/19 – The Medical News: Women scientists receive lesser federal funding compared to male investigators by James Ives.
12. 03/06/19 – Inside Higher Ed: Smaller Pots for Women by Colleen Flaherty.
13. 03/06/19 – Inverse: Study Reveals Size of US Government’s Gender Pay Gap for Scientists by Sarah Sloat.
14. 03/06/19 – WTTW: Study: Female Scientists Receive \$40K Less in Federal Funding Than Men by Alex Ruppenthal.
15. 03/07/19 – Arstechnica: New study suggests women may be getting less money to start labs by John Timmer.
16. 03/07/19 – The Business Journal: Women scientists awarded smaller NIH grants by Anne Stych.
17. 03/07/19 – Futurity: Women’s First NIH Grants Tend to be \$41k Less by Marla Pau.
18. 03/07/19 – Smithsonian Magazine: Women in Science Receive Less Grant Money Than Their Male Peers by Meilan Solly.
19. 03/07/19 – Government Executive: Women’s First NIH Grants Tend To Be \$41K Less by Marla Paul.
20. 03/08/19 – Science/AAAS: Men get larger first NIH grants, but is the news all bad for female scientists? by Jocelyn Kaiser
21. 03/08/19 – Long Room: Men get larger first NIH grants, but is the news all bad for female scientists?
22. 03/08/19 – The Scientist Magazine: Study Finds Gender Imbalances in First-Time NIH Awards by Shawna Williams.
23. 03/08/19 – Pacific Standard: New female scientists get \$40,000 less in federal grants than new male ones, study finds by Francie Diep.

24. 03/14/19 – The Toronto Star: Female scientists receive on average about \$40K less in federal funding by Alison Bowen.
25. 03/15/19 – Drugs.com: Funding Gap Leaves Women Scientists at a Lifelong Disadvantage: Study.
26. 03/15/19 – US News: Funding Gap Leaves Women Scientists at a Lifelong Disadvantage: Study by Robert Preidt.
27. 03/15/19 – Health Day: Funding Gap Leaves Women Scientists at a Lifelong Disadvantage: Study by Robert Preidt.
28. 03/15/19 – Doctors Lounge: Funding Gap Leaves Women Scientists at a Lifelong Disadvantage: Study.
29. 03/15/19 – MedicineNet.com: Funding Gap Leaves Women Scientists at a Lifelong Disadvantage: Study by Robert Preidt.
30. 03/15/19 – UPI.com: Study: U.S. gives less early-career research funding to women by HealthDay News.
31. 03/19/19 – Inverse: Freshman Congresswoman Calls Out US Health Officials for Gender Disparities.
32. 04/12/19 – Star Tribute: Women scientists get less federal funding than men, study finds by Sarah Sloat.
33. 04/12/19 – Inside Higher ED: The White Man Template and Academic Bias by Rebecca A. Reid.
34. 04/27/19 – Voice of America: Study: Female Researchers Get Less Financial Support than Males by Thompson and Pete Musto.
35. 05/02/19 – Kellogg Insight: How Big is the Gender Gap in Science Research Funding? by Susie Allen.
36. 06/11/19 – Cornell Chronicle: Grant writing course for female faculty tackles funding gap by Melanie Lefkowitz.
37. 06/13/19 - Forbes: A Push For More Inclusivity In Science by Anna Powers.
38. 07/29/19 - The Washington Post: I'm a female surgeon. I feel uncomfortable telling girls they can be one, too by Nikki Stamp.

Our paper Women who win prizes get less money and prestige was featured in:

1. 01/18/19 – The Scientist Magazine: Women Who Win Science Prizes Earn Less Money, Prestige than Men by Ashley Yeager.
2. 01/18/19 – Globes: The scientist studying how scientific discovery comes about (Article written in Hebrew, January 2019. English translation)
3. 01/20/19 – The Conversation: Minding the gender gap in science prize by Viviane Callier.
4. 02/14/19 – Harvard Business Review: Women Are Winning More Scientific Prizes, But Men Still Win the Most Prestigious Ones by Brian Uzzi.
5. 02/07/19 – Il Solo 24 Ore: Donne scienziate, una minoranza in ascesa by Patrizia Caraveo.
6. 02/16/19 – SheThePeopleTv: Women Are Winning More Scientific Prizes But Lesser Prestige Than Men by Sonakshi Goel.
7. 03/06/19 - The Philadelphia Inquirer: Encourage girls to speak their minds, even if it means interrupting — Opinion by Marisa Porges.
8. 03/07/19 - The Business Journals: Women scientists awarded smaller NIH grants by Anne Stych.
9. 03/11/19 - Bangor Daily News: Encourage girls to speak their minds, even if it means interrupting by Marisa Porges.
10. 08/06/19 - Physics World: Why we need to keep talking about equality in physics by Jess Wade and Maryam Zaringhalam.
11. 04/28/19 - El Pais: Las científicas ganan cada vez más premios pero ellos se siguen llevando los más prestigiosos by M. Victoria S. Nadal.

Our paper Characterizing the Impact of Women in Academic IR: A 12-Year Analysis was featured in:

1. 10/05/2018 – Academic interventional radiology community inclusive of female researchers by Michael Walter.

Our paper about diffusion of information in online social media was featured in:

1. 07/14/17 – Scientific American: How Fake News Goes Viral—Here’s the Math by Madhusree Mukerjee.
2. 07/05/17 – Tout Dz: Des scientifiques expliquent pourquoi les fake news sont si virales.
3. 07/04/17 – Naked Scientists – BBC and ABC: Fake News: Why is it spreading? AUDIO: Audio Player
4. 07/03/17 – Público: Como é que as notícias falsas se tornam virais? by Andrea Cunha Freitas .
5. 07/02/17 – TechBook: Studie: Moral und Emotion pushen Posts in sozialen Netzwerken.
6. 07/02/17 – To the Best of Our Knowledge: Who Shares A Fake Story? Fake Users.
7. 07/01/17 – Atlas: Infoteadlane: närvidele käiva sõbra vaigistamisega teed iseendale karuteene.
8. 06/30/17 – Libération: Chasser les “robots” des réseaux sociaux pour réduire les “fakes news”.
9. 06/30/17 – NiemanLab: If you think nobody’s shared any fake news with you recently, maybe you should think harder by Laura Hazard Owen .
10. 06/29/17 – Suara: Ini Sebabnya Hoax Bisa Viral di Internet by Liberty Jemadu.
11. 06/29/17 – Smithsonian: How Fake News Breaks Your Brain by Ben Panko.
12. 06/29/17 – Huffington Post: Science Explains Why Fake News Goes Viral by Agata Blaszcak-Boxe.
13. 06/29/17 – The Star Online: Information overload fuels ‘fake news’: study.
14. 06/28/17 – BRTtoday: Dr. Filippo Menacer on Fake News Spreading by Joe Virgillito (Radio Interview).
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18. 06/27/17 – Novaator: Infoteadlane: närvidele käiva sõbra vaigistamisega teed iseendale karuteene by Jaan-Juhan Oidermaa.
19. 06/27/17 – German Public Radios – Forschung Aktuell: Erfolg dank Sozialer Medien: Fake News profitieren von der Informationsflut. [AUDIO]
20. 06/27/17 – MoneyScience: Limited individual attention and online virality of low-quality information.
21. 06/27/17 – Perth Now: Real reason fake news spreads so fast on Facebook and Twitter by Jennifer Dudley-Nicholson.
22. 06/27/17 – 20 Minutes: Chasser les robots pour limiter les fakes news.
23. 06/27/17 – AFP: Information overload fuels ‘fake news’ – study by Mariëtte Le Roux.
24. 06/27/17 – Tiscali: Fake news, così dilagano online.
25. 06/27/17 – The Christian Science Monitor: How information overload helps spread fake news by Eoin O’Carroll.
26. 06/27/17 – The Australian: Information overload fuels fake news says study.
27. 06/27/17 – Le Scienze: I fattori che favoriscono la diffusione di fake news.
28. 06/27/17 – ScienceNet.cn: Research reveals the mystery of fake news and scams being mad.
29. 06/27/17 – Nature Asia: Why fake news and hoaxes goes viral.
30. 06/27/17 – FutureZone.at: Studie: Infoflut im Netz begünstigt Falschmeldungen.
31. 06/27/17 – Augsburg Allgemeine: Moral und Emotion pushen Posts in sozialen Netzwerken.
32. 06/27/17 – Cosmo: Information overload to blame for low quality of viral content.

33. 06/27/17 – Yahoo Japan: Why does "fake news" jump by Ishida Masahiko.
34. 06/27/17 – Live Science: Why Fake News Goes Viral: Science Explains by Agata Blaszczyk-Boxe.
35. 06/27/17 – The Northern Star: The reason fake news spreads so fast on Facebook and Twitter by Jennifer Dudley-Nicholson.
36. 06/27/17 – DerStandard.at: Studie: Informationsflut im Internet begünstigt Falschmeldungen.
37. 06/27/17 – The Queensland Times: The reason fake news spreads so fast on Facebook and Twitter by Jennifer Dudley-Nicholson.
38. 06/26/17 – Wa.de: Studie: Informationsflut im Internet begünstigt gezielte Falschmeldungen.
39. 06/26/17 – Pforzheimer Zeitung: Moral und Emotion pushen Posts.
40. 06/26/17 – Nova: Fake News is Spreading Thanks to Information Overload by Bianca Datta.
41. 06/26/17 – Hersfelder Zeitung: Studie: Informationsflut im Internet begünstigt gezielte Falschmeldungen.
42. 06/26/17 – The Verge: Your short attention span could help fake news spread by Rachel Becker.
43. 06/26/17 – Business Insider: There's a fascinating new explanation for why fake news goes viral by Erin Brodwin.
44. 06/26/17 – Phys.Org: Information overload fuels 'fake news': study.
45. 06/26/17 – ABC: Why do we fall for fake news? It's because we can't concentrate, study says by Sophie Scott.
46. 06/26/17 – Mental Floss: Why We Keep Falling for Fake News by Kate Horowitz.
47. 06/26/17 – Last Nigerian News: There's a fascinating psychological explanation for why fake news goes viral by Erin Brodwin.
48. 06/26/17 – Die Welt: Wie Postings zu viralen Hits werden by Von Maria Berentzen.
49. 06/26/17 – HNA: Studie: Informationsflut im Internet begünstigt gezielte Falschmeldungen.
50. 06/26/17 – TVA Nouvelles: Chasser les robots des réseaux sociaux pour réduire les fausses nouvelles by Agence France-Presse.
51. 06/26/17 – UOL: Por que os boatos e as notícias falsas viralizam nas redes sociais? by André Carvalho.
52. 06/26/17 – Il Sole 24 Ore: Fake news, algoritmi e ora il chatbot che contrasta la disinformazione in rete by – Guido Romeo.
53. 06/26/17 – ORF.AT: Wie virale Botschaften entstehen.
54. 06/26/17 – MeteoWeb: Sempre più bufale sul web: ecco perché accade e cosa fare per evitarle by Monia Sangermano.
55. 06/26/17 – Patch: Anatomy Of Fake News: Erroneous Texas Tweet Alleging Trump Protest At Center Of Study by Tony Cantu and Patch Staff.
56. 06/26/17 – News.com.au: Real reason fake news spreads so fast on Facebook and Twitter by Jennifer Dudley-Nicholson.
57. 06/26/17 – DW: Politische Twitter-Posts: Welche gehen viral?

Our paper on social bubbles was featured in

1. 01/04/15 – WBAA: Social Media Isolates News Consumers Into 'Bubbles,' Says IU Study by Alexander McCall.
2. 12/15/15 – Indiana Public Media: IU Study Finds Social News Consumers' Clicks Less Diverse by Alexander McCall.
3. 12/14/15 – EurekAlert! [American Association for the Advancement of Science (AAAS)]: Social media news consumers at higher risk of information bubbles by Kevin D. Fryling.
4. 12/14/15 – Hoosier Times: Where you get your news online might be trapping you in a collective social bubble by Kat Carlton.

5. 12/08/15 – the Indiana University Newsroom: Social media news consumers at higher risk of information bubbles by Kevin Fryling.
6. 12/08/15 – the Italian newspaper Il Manifesto: Twitter revolution? More like an echo chamber.

I have read the following and certify that it is a current and accurate statement of my professional record as of 06/08/2022.

Diego Fregolent Mendes de Oliveira

Date