

Curriculum Vitae

Current position

Associate Professor

Center for Complex Networks and Systems Research

School of Informatics, Computing, and Engineering

Indiana University

919 E. 10th Street, Bloomington IN, 47408 (USA)

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Education

Ph.D. in Physics, School of Engineering and Sciences, Jacobs University, Bremen, Germany October 19th, 2007

M.S. (Laurea) in Physics, Department of Physics, University of Rome "Tor Vergata", Italy July 11th, 2003

Professional experience

Associate Professor, Center for Complex Networks and Systems Research, School of Informatics, Computing, and Engineering, Indiana University, Bloomington IN, USA July 2017 - present

Assistant Professor, Center for Complex Networks and Systems Research, School of Informatics and Computing, Indiana University, Bloomington IN, USA Aug. 2013- June 2017

"Ramón y Cajal" Senior Researcher, University Rovira i Virgili, Tarragona, Spain Jan. 2012 – July 2013

Postdoctoral Fellow, Amaral Lab, Department of Chemical & Biological Engineering, Northwestern University, Evanston, USA Oct. 2010 - Dec. 2011

Research Scientist, Complex Networks & Systems, Institute for Scientific Interchange Foundation, Torino, Italy Jun. 2007 - Sep. 2010

Ph.D. Student, School of Engineering and Sciences, Jacobs University Bremen, Germany Jun. 2004 - May 2007

Teaching experience

I369: *Performance Analytics*, Indiana University, USA Spring 2018

I601: *Introduction to Complex Systems*, Indiana University, USA Fall 2017

I369: *Performance Analytics*, Indiana University, USA Spring 2017

I201: *Math. Foundation of Informatics*, Indiana University, USA Fall 2016

I400: *Performance Analytics*, Indiana University, USA Spring 2016

I601: *Introduction to Complex Systems*, Indiana University, USA Fall 2015

I400: *Performance Analytics*, Indiana University, USA Spring 2015

I400: *Introduction to network science*, Indiana University, USA Fall 2014

I400: *Performance Analytics*, Indiana University, USA Spring 2014

I601: *Introduction to Complex Systems*, Indiana University, USA Fall 2013

<i>Classical physics</i> , University Rovira i Virgili, Tarragona, Spain	Fall 2012
<i>Computer science and statistical physics</i> , Jacobs University Bremen, Germany	Fall 2005
<i>Statistical mechanics of complex networks</i> , Jacobs University Bremen, Germany	Fall 2004
<i>Dynamics of non-linear systems: Applications for social and biological problems</i> , Consiglio Nazionale delle Ricerche (CNR), Rome, Italy	Spring 2004
Didactic laboratory of Physics, University of Rome "Tor Vergata", Italy	Fall 2000/Spring 2001

Student/Postdoc Supervision

- Member of the Ph.D. committee for Dr. J. Kaur, Indiana University (advisor F. Menczer).
- Currently supervising the research activity of the Ph.D. students K. Bathina, S. Erkol and D. Notarmuzi, Indiana University.
- Research supervisor of the postdoctoral researcher A. Faqeeh, Indiana University.
- Chair of the qualifying exam committee for the Ph.D. student P. Moriano, Indiana University.

Honors/Awards

Outstanding Referee, American Physical Society	2018
Career Award, National Science Foundation	2016
Junior Scientific Award, Complex Systems Society	2014
Accreditation as Associate Professor, Ministry of Research and University, Italy	2013
Accreditation as Tenured Assistant Professor, Agency for the Quality of the University system (AQU) of Catalunya	2012
"Ramón y Cajal" Fellowship, Ministry of Science and Innovation of Spain	2012

Grants

An empirical investigation of the Goodhart effect for the widespread introduction of (alt)metrics, National Science Foundation, SMA-1636636 (Co-PI)	\$471,469	2016
"EAGER: Collaborative Research: The Productivity of Science: Structural Characteristics and the Pace of Scientific Advance", National Science Foundation, SMA-1646459 (Co-PI)	\$58,246	2016
"Structural and dynamical transitions in networks of networks", U.S. Army Research Office, W911NF- 16-1-0104 (PI)	\$375,000	2016
"CAREER: Network Theory of Critical Interdependent Infrastructures", National Science Foundation, CMMI-1552487 (PI)	\$508,000	2016

“Big Science Survey”, National Science Foundation, SMA-1446078 (PI)	\$178,000	2014
“Ramón y Cajal” grant, Ministry of Science and Innovation, Spain (PI)	187,000€	2012

Professional services

Memberships

American Physical Society	2014-present
Complex Systems Society	2012-present

Referee for scientific journals

Advances in Complex Systems, Computer Physics Communications, European Journal of Physics B, European Journal of Data Science, Europhysics Letters (EPL), IEEE Transactions, Journal of Complex Networks, Journal of Computational Science, Journal of Economic Interaction and Coordination, Journal of Graph Algorithms and Applications, Journal of Informetrics, Journal of Physics A, Journal of Quantitative Analysis of Sports, Journal of Statistical Mechanics, Journal of Statistical Physics, Journal of the American Society for Information Science and Technology, Mathematical Social Science, Nature Communications, Nature Physics, Nature, Nature Scientific Reports, Networks and Spatial Economics, Physica A, Physical Review Letters, Physical Review E, Physical Review X, PloS One, Proceedings of the National Academy of Sciences USA, Reviews of Modern Physics, Science Advances, Scientometrics, Social Networks, World Wide Web Conference.

Reviewer and panelist for funding agencies

National Science Foundation; The National Academies of Sciences, Engineering and Medicine; Polish Academy of Sciences; Israel Science Foundation; Austrian Academy of Sciences.

Editorial Board

Journal of Informetrics

Academic Editor

PloS ONE

Program Committees

- WWW 2018, Lyon, France, April 2018.
- NetSci 2018, Paris, France, June 2018.
- NetSciX 2018, Hangzhou, China, January 2018.
- WWW 2017, Perth, Australia, April 2017.
- Satellite chair, NetSci 2017, Indianapolis, USA, June 2017.
- NetSci 2016, Seoul, Korea, June 2016.
- IC2S2, International Conference on Computational Social Science, Evanston, USA, June 2016.

- 7th Workshop on Complex Networks “Complenet 2016”, Dijon, France, March 2016.
- CCS 2015, International Conference of the Complex Systems Society, Tempe, USA, September 2015.
- IC2S2, International Conference on Computational Social Science, Helsinki, Finland, June 2015.
- Organizer of the workshop “Quantum frontiers in network science”, NetSci 2014, Berkeley, USA, June 2014.
- Organizer of the workshop “The web of science: Current trends and future perspectives”, ACM Web Science 2014, Bloomington, USA, June 2014.
- Publication chair, ACM Web Science 2014, Bloomington, USA, June 2014.
- 4th Workshop on Complex Networks “Complenet 2013”, Berlin, Germany, March 2013.
- International Workshop on Complex Networks and their Applications, Sorrento, Italy, November 2012.
- 3rd Workshop on Complex Networks “Complenet 2012”, Melbourne, USA, March 2012.
- HT 2008, The Nineteenth ACM Conference on Hypertext and Hypermedia, Torino, Italy, 2008

Invited and contributed talks (last 4 years)

- Invited talk, Workshop “DOOCN-XI: Dynamics On and Of Complex Networks,” CCS 2018, Thessaloniki, Greece, September 2018.
- Contributed talk, CCS 2018, Thessaloniki, Greece, September 2018.
- Contributed talk, NetSci 2018, Paris, France, June 2018.
- Invited talk, NetSciX 2018, Hangzhou, China, January 2018.
- Invited lecture, CCS 2018, Cancun, Mexico, September 2018.
- Invited talk, Workshop “Social influence in networks,” NetSci 2017, Indianapolis, USA, June 2017.
- Contributed talk, CCS 2016, Amsterdam, Netherland, September 2016.
- Contributed talk, Netsci 2016, Seoul, Korea, June 2016.
- Invited talk, Northwestern Institute on Complex Systems, Evanston, USA, December 2015.
- Invited talk, Workshop “Quantifying science”, CCS 2015, Tempe, USA, September 2015.
- Contributed talk, CCS 2015, Tempe, USA, September 2015.
- Invited talk, Workshop “Physics of multilayered complex networks”, NetSci 2015, Zaragoza, Spain, June 2015.
- Contributed talk, NetSci 2015, Zaragoza, Spain, June 2015.
- Invited talk, Workshop “Quantifying success”, ECCS 2014, Lucca, Italy, September 2014.
- Contributed talk, ECCS 2014, Lucca, Italy, September 2014.
- Invited talk, Web science and the mind, Montreal, Canada, July 2014.
- Contributed talk, NetSci 2014, Berkeley, USA, June 2014.
- Invited talk, Workshop “Physics of multilayered complex networks”, NetSci 2014, Berkeley, USA, June 2014.
- Invited talk, Workshop “Computational approaches to social modeling”, ACM Web Science 2014, Bloomington, USA, June 2014.
- Contributed talk, APS March Meeting, Denver, USA, March 2014.

Publications

International peer-reviewed journals

1. F. Radicchi and C. Castellano, *Uncertainty reduction for stochastic processes on complex networks*, Phys. Rev. Lett. **120**, 198301 (2018).
<https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.120.198301>
2. S. Osat and F. Radicchi, *Observability transition in multiplex networks*, Physica A **503**, 745-761 (2018).
<https://www.sciencedirect.com/science/article/pii/S0378437118302310>
3. S. Fortunato, C. T. Bergstrom, K. Börner, J. A. Evans, D. Helbing, S. Milojević, A. M. Petersen, F. Radicchi, R. Sinatra, B. Uzzi, A. Vespignani, L. Waltman, D. Wang, A.-L. Barabási, *Science of science*, Science **359**, eaao0185 (2018).
<http://science.sciencemag.org/content/359/6379/eaao0185>
4. F. Radicchi, *Decoding communities in networks*, Phys. Rev. E **97**, 022316 (2018).
<https://journals.aps.org/pre/abstract/10.1103/PhysRevE.97.022316>
5. S. Osat, A. Faqeeh and F. Radicchi, *Optimal percolation on multiplex networks*, Nat. Comm. **8**, 1540 (2017).
<https://www.nature.com/articles/s41467-017-01442-2>
6. F. Radicchi and G. Bianconi, *Redundant interdependencies boost the robustness of multilayer networks*, Phys. Rev. X **7**, 011013 (2017).
<http://journals.aps.org/prx/abstract/10.1103/PhysRevX.7.011013>
7. F. Radicchi and C. Castellano, *Fundamental difference between superblockers and superspreaders in networks*, Phys. Rev. E **95**, 012318 (2017)
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.95.012318>
8. F. Radicchi, A. Weissman and J. Bollen, *Quantifying the ground-truth impact of scientific publications*, J. Informetr. **11**, 704–712 (2017).
<http://www.sciencedirect.com/science/article/pii/S1751157717300846>
9. S. Milojević, J. Bar-Ilan and F. Radicchi, *Citation success index – An Intuitive pair-wise journal comparison metric*, J. Informetr. **11**, 223-231 (2017).
<http://www.sciencedirect.com/science/article/pii/S1751157716301936>
10. G. Bianconi and F. Radicchi, *Percolation in real multiplex networks*, Phys. Rev. E **94**, 060301(R) (2016).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.94.060301>
11. X. H. T. Zeng, J. Duch, M. Sales-Pardo, J. A. G. Moreira, F. Radicchi, H. V. Ribeiro, T. K. Woodruff and L. A. N. Amaral, *Differences in collaboration patterns across discipline, career stage, and gender*, PloS Biol. **14**, e1002573 (2016).
<http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1002573>
12. Y. Yang and F. Radicchi, *Observability transition in real networks*, Phys. Rev. E **94**, 030301(R) (2016).
<https://journals.aps.org/pre/abstract/10.1103/PhysRevE.94.030301>
13. F. Radicchi and C. Castellano, *Leveraging percolation theory to identify influential spreaders in real networks*, Phys. Rev. E **93**, 030302(R) (2016).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.93.062314>

14. F. Radicchi and C. Castellano, *Beyond the locally tree-like approximation for percolation on real networks*, Phys. Rev. E **93**, 030302(R) (2016).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.93.030302>
15. F. Radicchi and C. Castellano, *Breaking of the site-bond percolation universality in networks*, Nat. Commun. **6**, 10196 (2015).
<http://www.nature.com/ncomms/2015/151215/ncomms10196/full/ncomms10196.html>
16. F. Radicchi, *Percolation in real interdependent networks*, Nat. Phys. **11**, 597-602 (2015).
<http://www.nature.com/nphys/journal/vaop/ncurrent/full/nphys3374.html>
17. J. Kaur, E. Ferrara, A. Flammini, F. Menczer and F. Radicchi, *Quality versus quantity in scientific impact*, J. Informetr. **9**, 800-808 (2015).
<http://www.sciencedirect.com/science/article/pii/S1751157715200120#>
18. F. Radicchi, *Predicting percolation thresholds in networks*, Phys. Rev. E **91**, 010801(R) (2015).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.91.010801>
19. Q. Ke, E. Ferrara, F. Radicchi and A. Flammini, *Defining and identifying sleeping beauties in science*, Proc. Natl. Acad. Sci. USA **112**, 7426-7431 (2015).
<http://www.pnas.org/content/112/24/7426.abstract>
20. M. Wasserman, S. Mukherjee, K. Scott, X.H.T. Zeng, F. Radicchi and L.A.N. Amaral, *Correlations between user voting data, budget, and box office for films in the Internet Movie Database*, J. Am. Soc. Inf. Sci. Tech. **66**, 858-868 (2015).
<http://onlinelibrary.wiley.com/doi/10.1002/asi.23213/abstract>
21. F. Radicchi, *Underestimating extreme events in power-law behavior due to machine-dependent cutoffs*, Phys. Rev. E **90**, 050801(R) (2014).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.90.050801>
22. F. Radicchi, *A paradox in community detection*, EPL **106**, 38001 (2014).
<http://iopscience.iop.org/article/10.1209/0295-5075/106/38001>
23. F. Radicchi, *Driving interconnected networks to supercriticality*, Phys. Rev. X **4**, 021014 (2014).
<http://journals.aps.org/prx/abstract/10.1103/PhysRevX.4.021014>
24. J. Kaur, F. Radicchi and F. Menczer, *On the use of sampling statistics to advance bibliometrics*, J. Informetr. **8**, 419-420 (2014).
<http://www.sciencedirect.com/science/article/pii/S1751157714000170>
25. J. Kaur, F. Radicchi and F. Menczer, *Universality of scholarly impact metrics*, J. Informetr. **7**, 924-932 (2013).
<http://www.sciencedirect.com/science/article/pii/S1751157713000746>
26. F. Radicchi and A. Arenas, *Abrupt transition in the structural formation of interconnected networks*, Nat. Phys. **9**, 717-720 (2013).
<http://www.nature.com/nphys/journal/vaop/ncurrent/abs/nphys2761.html>
27. F. Radicchi, *Detectability of communities in heterogeneous networks*, Phys. Rev. E **88**, 010801(R) (2013).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.88.010801>
28. L. Leydesdorff, F. Radicchi, L. Bornmann, C. Castellano and W. De Nooy, *Field-normalized Impact Factors: A Comparison of Rescaling versus Fractionally Counted Ifs*, J. Am. Soc. Inf. Sci. Tech. **64**, 2299-2309(2013).
<http://onlinelibrary.wiley.com/doi/10.1002/asi.22911/abstract>

29. A. Baronchelli and F. Radicchi, *Levy-flights in human behavior and cognition*, Chaos Soliton. Fract. **56**, 101-105 (2013).
<http://www.sciencedirect.com/science/article/pii/S0960077913001379>
30. Y. Li, F. Radicchi, C. Castellano and J. Ruiz-Castillo, *Quantitative evaluation of alternative field normalization procedures*, J. Informetr. **7**, 746-755 (2013).
<http://www.sciencedirect.com/science/article/pii/S1751157713000485>
31. F. Radicchi and C. Castellano, *Analysis of bibliometric indicators for individual scholars in a large data set*, Scientometrics **97**, 627-637 (2013).
<http://link.springer.com/article/10.1007%2Fs11192-013-1027-3>
32. J. Duch, X.H.T. Zeng, M. Sales-Pardo, F. Radicchi, S. Otis, T.K. Woodruff and L.A.N. Amaral, *The possible role of resource requirements and academic career-choice risk on gender differences in publication rate and impact*, PloS ONE **7**, e51332 (2012).
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0051332>
33. F. Radicchi, *In science "there is no bad publicity": Papers criticized in comments have high scientific impact*, Nature Scientific Reports **2**, 815 (2012).
<http://www.nature.com/srep/2012/121108/srep00815/full/srep00815.html>
34. F. Radicchi, *Universality, limits and predictability of gold-medal performances at the Olympic Games*, Plos ONE **7**, e40335 (2012).
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0040335>
35. F. Radicchi and C. Castellano, *Why Sirtes's claims do not square with reality*, J. Informetr. **6**, 615-618 (2012).
<http://www.sciencedirect.com/science/article/pii/S1751157712000442>
36. F. Radicchi and A. Baronchelli, *Evolution of optimal Lévy-flight strategies in human mental searches*, Phys. Rev. E **85**, 061121 (2012).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.85.061121>
37. F. Radicchi and C. Castellano, *A reverse engineering approach to the suppression of citation biases reveals universal properties of citation distributions*, PloS ONE **7**, e33833 (2012).
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0033833>
38. F. Radicchi, A. Baronchelli and L.A.N. Amaral, *Rationality, irrationality and escalating behavior in lowest unique bid auctions*, PloS ONE **7**, e29910 (2012).
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0029910>
39. F. Radicchi and C. Castellano, *Testing the fairness of citation indicators for comparison across scientific domains: the case of fractional citation counts*, J. Informetr. **6**, 121-130 (2012).
<http://www.sciencedirect.com/science/article/pii/S1751157711000794>
40. S. Fortunato and F. Radicchi, *Explosive percolation in graphs*, J. Phys.: Conf. Ser. **297**, 012009 (2011).
<http://iopscience.iop.org/article/10.1088/1742-6596/297/1/012009/meta>
41. A. Lancichinetti, F. Radicchi, J.J. Ramasco and S. Fortunato, *Finding statistically significant communities in networks*, PloS ONE **6**, e18961 (2011).
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0018961>
42. F. Radicchi and C. Castellano, *Rescaling citations of publications in physics*, Phys. Rev. E **83**, 046116 (2011).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.83.046116>
43. F. Radicchi, *Who is the best player ever? A complex network analysis of the history of professional tennis*, PloS ONE **6**, e17249 (2011).
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0017249>

44. F. Radicchi, J.J. Ramasco and S. Fortunato, *Information filtering in complex weighted networks*, Phys. Rev. E **83**, 046101 (2011).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.83.046101>
45. F. Radicchi, A. Lancichinetti and J.J. Ramasco, *Combinatorial approach to modularity*, Phys. Rev. E **82**, 026102 (2010).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.82.026102>
46. A. Lancichinetti, F. Radicchi and J.J. Ramasco, *Statistical significance of communities in networks*, Phys. Rev. E **81**, 046110 (2010).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.81.046110>
47. F. Radicchi and S. Fortunato, *Explosive percolation: A numerical analysis*, Phys. Rev. E **81**, 036110 (2010).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.81.036110>
48. F. Radicchi, S. Fortunato, B. Markines and A. Vespignani, *Diffusion of scientific credits and the ranking of scientists*, Phys. Rev. E **80**, 056103 (2009).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.80.056103>
49. F. Radicchi and S. Fortunato, *Explosive percolation in scale-free networks*, Phys. Rev. Lett. **103**, 168701 (2009).
<http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.103.168701>
50. F. Radicchi, *Human activity in the web*, Phys. Rev. E **80**, 026118 (2009).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.80.026118>
51. C. Castellano and F. Radicchi, *On the fairness of using relative indicators for comparing citation performance in different disciplines*, Arch. Immunol. Ther. Ex. **57**, 85-90 (2009).
<http://link.springer.com/article/10.1007%2Fs00005-009-0014-0>
52. F. Radicchi, A. Barrat, S. Fortunato and J.J. Ramasco, *Renormalization flows in complex networks*, Phys. Rev. E **79**, 026104 (2009).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.79.026104>
53. F. Radicchi, S. Fortunato and C. Castellano, *Universality of citation distributions: towards an objective measure of scientific impact*, Proc. Natl. Acad. Sci. USA **105**, 17268-17272 (2008).
<http://www.pnas.org/content/early/2008/10/30/0806977105.abstract>
54. A. Lancichinetti, S. Fortunato and F. Radicchi, *Benchmark graphs for community detection algorithms*, Phys. Rev. E **78**, 046110 (2008).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.78.046110>
55. F. Radicchi, J.J. Ramasco, A. Barrat and S. Fortunato, *Complex networks renormalization: Flows and fixed points*, Phys. Rev. Lett. **101**, 148701 (2008).
<http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.101.148701>
56. F. Radicchi, Y.Y. Ahn and H. Meyer-Ortmanns, *Impact of the updating scheme on stationary states of networks*, J. Phys. A: Math. Theor. **41**, 224010 (2008).
<http://iopscience.iop.org/article/10.1088/1751-8113/41/22/224010/meta>
57. F. Radicchi, D. Vilone and H. Meyer-Ortmanns, *Phase transition between synchronous and asynchronous updating algorithms*, J. Stat. Phys. **129**, 593-603 (2007).
<http://link.springer.com/article/10.1007%2Fs10955-007-9416-8>
58. F. Radicchi, D. Vilone and H. Meyer-Ortmanns, *Universality class of triad dynamics on a triangular lattice*, Phys. Rev. E **75**, 021118 (2007).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.75.021118>

59. F. Radicchi, D. Vilone, S. Yoon and H. Meyer-Ortmanns, *Social balance as a satisfiability problem of computer science*, Phys. Rev. E **75**, 026106 (2007).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.75.026106>
60. F. Radicchi and H. Meyer-Ortmanns, *Reentrant synchronization and pattern formation in pacemaker-entrained Kuramoto oscillators*, Phys. Rev. E **74**, 026203 (2006).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.74.026203>
61. F. Radicchi and H. Meyer-Ortmanns, *Entrainment of coupled oscillators on regular networks by pacemakers*, Phys. Rev. E **73**, 036218 (2006).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.73.036218>
62. S.H. Yook, F. Radicchi and H. Meyer-Ortmanns, *Self-similar scale-free networks and disassortativity*, Phys. Rev. E **72**, 045105(R) (2005).
<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.72.045105>
63. C.Castellano, F.Cecconi, V.Loreto, D.Parisi and F.Radicchi, *Self-contained algorithms to detect communities in networks*, Eur. Phys. J. B **38**, 311 (2004).
<http://epjb.epj.org/component/article?access=doi&doi=10.1140/epjb/e2004-00123-0>
64. F.Radicchi, C.Castellano, F.Cecconi, V.Loreto and D.Parisi, *Defining and identifying communities in networks*, Proc. Natl. Acad. Sci. USA **101**, 2658-2663 (2004).
<http://www.pnas.org/content/101/9/2658.abstract>

Book chapters

65. A. Arenas and F. Radicchi, *A tipping point in the formation of interconnected networks*, in *Interconnected Networks*, Eds. A. Garas and F. Schweitzer (Springer, 2016).
http://link.springer.com/chapter/10.1007%2F978-3-319-23947-7_1
66. F. Radicchi and C. Castellano, *Understanding the scientific enterprise: citation analysis, data and modeling*, in *Social Phenomena: From Data to Models*, Eds. N. Perra and B. Goncalves (Springer, 2015).
http://link.springer.com/chapter/10.1007/978-3-319-14011-7_8
67. F. Radicchi, S. Fortunato and A. Vespignani, *Citation networks*, in *Models of Science Dynamics: Encounters Between Complexity Theory and Information Sciences*, Eds. A. Scharnhorst, K. Borner and P. Besselaar (Springer, 2012).
<http://www.springer.com/us/book/9783642230677>

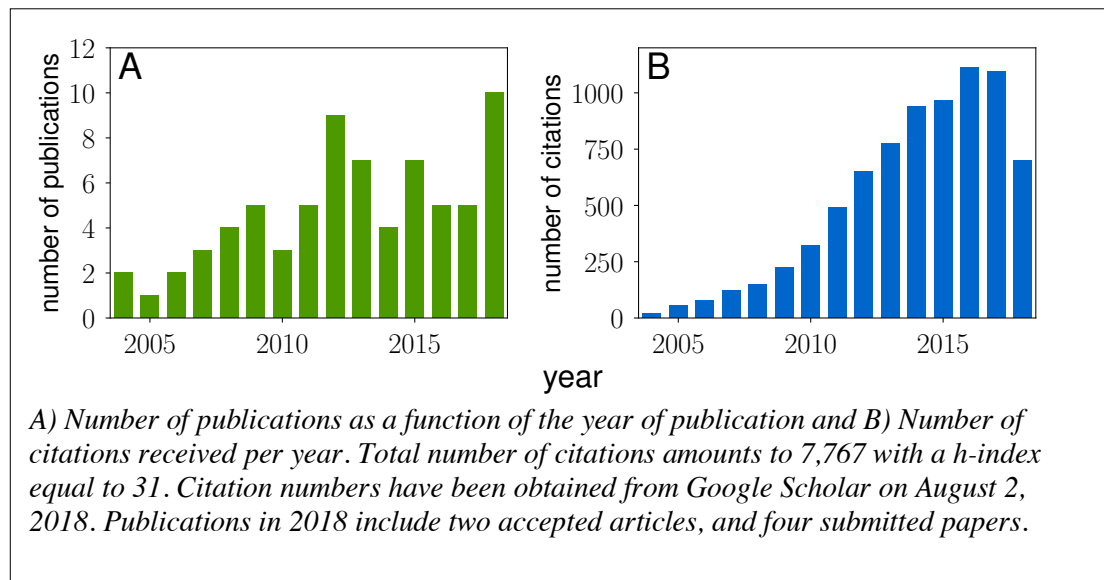
Accepted/submitted

68. S. Milojević, F. Radicchi and J. Walsh, *The Changing Demographics of Scientific Careers: The Rise of the Expendable Workforce*, accepted for publication in PNAS.
69. A. Faqueeh, S. Osat and F. Radicchi, *Characterizing the analogy between hyperbolic embedding and community structure of complex networks*, accepted for publication in Physical Review Letters.
70. S. Lim, F. Radicchi, M. de Reus, M.P. van den Heuvel and O. Sporns, *Discordant attributes of structural and functional connectivity in two-layer multiplex network*, under review.
71. S. Erkol, A. Faqueeh and F. Radicchi, *Identifying influential spreaders in noisy networks*, under review.
72. X. Yan, L. Jeub, A. Flammini, F. Radicchi and S. Fortunato, *Weight thresholding on complex networks*, under review.

73. F. Coghi, F. Radicchi and G. Bianconi, Controlling the uncertain response of real multiplex to random damage, under review.

Research Impact

Bibliometric impact



In the press

1. The paper *Percolation in real interdependent networks*, *Nature Phys.* **11**, 597-602 (2015) has been featured by *PhysOrg* and *Homeland Security Today*.
2. The paper *Defining and identifying sleeping beauties in science*, *Proc. Natl. Acad. Sci. USA* **112**, 7426-7431 (2015) has been featured by *Nature*, *New York Times*, *PhysOrg* and many other newspapers.
3. The paper *Driving interconnected networks to supercriticality*, *Phys. Rev. X* **4**, 021014 (2014) has been featured by *Nature Physics*.
4. The paper *A paradox in community detection*, *EPL* **106**, 38001 (2014) has been featured by *Phys.org*.
5. The paper *Universality of scholarly impact metrics*, *J. Informetr.* **7**, 924-932 (2013) has been featured by *Nature News* and *Scientific American*.
6. The paper *In science "there is no bad publicity": Papers criticized in comments have high scientific impact*, *Nature Scientific Reports* **2**, 815 (2012) has been featured by the web blogs *FrancisTheMule* and *Tikalon*.
7. The paper *Universality, limits and predictability of gold-medal performances at the Olympic Games*, *PloS ONE* **7**, e40335 (2012) has been featured by *The Guardian*, *Wired*, *Huffington Post*, *Artze Zeitung* and *SmartNews*.
8. The paper *Rationality, irrationality and escalating behavior in lowest unique bid auctions*, *PloS ONE* **7**, e29910 (2012) has been featured by *Northwestern University press*, *PhysOrg*, *Physch* and *NSF press*.
9. The paper *Who is the best player ever? A complex network analysis of the history of professional tennis*, *PloS ONE* **6**, e17249 (2011), has been featured by *Thomson Reuters*, *BBC Radio*, *The Wall Street Journal*, *Tennis.com*, *Eurosport UK*, *Eurosport ES*, *Eurosport IT*, *Eurosport DE*, *physicsworld.com*, *PhysOrg.com*, *RT*, *The Daily Forehand*, *NBC Sport*, *Bild*, *FOX News*, *The Independent*, *L.A. Times*, *Blick*, *El Universo*, *La Repubblica*, *Il Tempo*,

- Il Sole 24 ore, Il Secolo XIX, Express, The Bleacher Report, Ansa, Federazione Italiana Tennis, El Comercio, Timpul, Il Fatto Quotidiano, Daily India, UbiTennis, Northwestern University News, El Comercial*, and many other newspapers and web sites worldwide.
10. The paper *Diffusion of scientific credits and the ranking of scientists*, Phys. Rev. E **80**, 056103 (2009) has been featured by *Physics spotlighting exceptional research* and *Nature News*, and the web sites *physicsworld.com* and *pro-physik.de*.
 11. The paper *Universality of citation distributions: towards an objective measure of scientific impact*, Proc. Natl. Acad. Sci. USA **105**, 17268-17272 (2008) has been featured in *Nature News* and *Nature Nanotechnology*.
 12. The paper *Complex Networks Renormalization: Flows and Fixed Points*, Phys. Rev. Lett. **101**, 148701 (2008) has been highlighted by an *Editors' Suggestion* (assigned to articles dealing with topics potentially interesting for all physicists) and featured by *Physics spotlighting exceptional research*.

Scientific websites

1. <http://tennisprestige.soic.indiana.edu>
2. <http://www.physauthorsrank.org>
3. <http://bigscience.soic.indiana.edu>