

Curriculum Vitae

Personal Information:

Name: Linyuan Lü

Sex: Female

Birth: 1984.05

Nationality: P. R. China

Official Address: Department of Physics, University of Fribourg,
Chemin du Musee 3, CH-1700 Fribourg,
Switzerland



Homepage: <http://blog.sciencenet.cn/u/babyann519>

Email-address: linyuan.lue@unifr.ch

Education

- 2002/09-2006/07 Department of Systems Sciences, School of Management, Beijing Normal University, Bachelor Degree Majoring Management Science
- 2006/09-2008/07 Department of Systems Sciences, School of Management, Beijing Normal University, Master Degree Majoring Systems Science
- 2008/09-2012/03 Department of Physics, University of Fribourg, Doctor of Philosophy Majoring Statistical Physics

Awards and Honors

- 2002-2003, 2003-2004, 2004-2005 Academic scholarships of Beijing Normal University
- 2006 Outstanding Thesis Award of Beijing Normal University
- 2006-2007 Graduate students' scholarship of Beijing Normal University
- 2007 First Prize of National Postgraduates Mathematical Contest in Modeling

Research Achievements

My main research interests include complex networks and information filtering, an interdisciplinary domain related to both statistical physics and information sciences. I have published more than 30 research papers in peer-reviewed international journals and conferences, of which the majority are published in prestigious (top-accessed) physics, like Physics Reports, New Journal of Physics, Physical Reviews E, Europhysics Letters, as well as general science journals, like PLoS ONE.

Research Applications

I am a part-time scientific consultant for Xi'an Huilong Technology Inc., a value-added service provider with about 2000 employees and Baifendian Technology Inc., a business intelligent company with about 150 employees. Results from our algorithms have been displayed more than 300,000,000 times in mobile cellulators and web sites.

Publication List (*corresponding author)

Review Articles

- [1] **L. Lü**, T. Zhou, Link prediction in complex networks: A survey, *Physica A* 390, 1150 (2011).
- [2] **L. Lü**, M. Medo, C. H. Yeung, Y.-C. Zhang, Z.-K. Zhang, T. Zhou, Recommender Systems, *Physics Reports* (published on line). doi:10.1016/j.physrep.2012.02.006

Selected Papers (*corresponding author)

- [3] **L. Lü**, Y.-C. Zhang, C. H. Yeung, T. Zhou, Leaders in Social Networks, the delicious case, *PLoS ONE* 6(6): e21202 (2011).
- [4] **L. Lü**, Z.-K. Zhang, T. Zhou, Zipf's Law Leads to Heaps' Law: Analyzing Their Relation in Finite-Size Systems, *PLoS ONE* 5(12), e14139 (2010).
- [5] **L. Lü**, D.-B. Chen, T. Zhou, Small world yields the most effective information spreading, *New J. Phys.* 13, 123005 (2011).
- [6] Y.-B. Zhou, **L. Lü***, M. Li, Quantifying the influence of scientists and their publications: distinguishing between prestige and popularity, *New J. Phys.* 14, 033033 (2012).
- [7] D. Chen, G. Cimini, M. Medo, **HL. Lü**, Y.-C. Zhang, T. Zhou, Enhancing topology adaptation in information-sharing social networks, *Phys. Rev. E* 85, 046108 (2012). (IF=2.352)
- [8] **L. Lü***, W. Liu, Information filtering via preferential diffusion, *Phys. Rev. E* 83, 066119 (2011).
- [9] A. Zeng, **L. Lü***, Coarse Graining for Synchronization in Directed Networks, *Phys. Rev. E* 83, 056123 (2011).
- [10] **L. Lü**, C.-H. Jin, T. Zhou, Similarity index based on local paths for link prediction of complex network, *Phys. Rev. E* 80, 046122 (2009).
- [11] Z. Liu, Q.-M. Zhang, **L. Lü***, T. Zhou, Link prediction in complex networks: a local naïve Bayes model, *EPL* 96, 48007 (2011).
- [12] **L. Lü**, T. Zhou, Link Prediction in Weighted Networks: The Role of Weak Ties, *EPL* 89, 18001 (2010).
- [13] W.-P. Liu, **L. Lü***, Link Prediction based on Local Random walk, *EPL* 89, 58007 (2010).
- [14] M.-S. Shang, **L. Lü**, Y.-C. Zhang, T. Zhou, Empirical analysis of web-based user-object bipartite networks, *EPL* 90, 48006 (2010).
- [15] M.-S. Shang, **L. Lü**, W. Zeng, Y.-C. Zhang, T. Zhou, Relevance is More Significant than Correlation: Information Filtering on Sparse Data, *EPL* 88, 68008 (2009).

- [16]T. Zhou, **L. Lü**, Y.-C. Zhang, Predicting Missing Links via Local Information, *Eur. Phys. J. B* 71, 623-630 (2009).
- [17]**L. Lü**, M. Medo, Y.-C. Zhang, The role of a matchmaker in buyer-vendor interactions, *Eur. Phys. J. B* 71, 565-571 (2009).
- [18]**L. Lü**, M. Medo, Y.-C. Zhang, D. Challet, Emergence of product differentiation from consumer heterogeneity and asymmetric information, *Eur. Phys. J. B* 64, 293-300 (2008).
- [19]Z. Zhang, **L. Lü**, J. G. Liu, T. Zhou, Empirical analysis on a keyword-based semantic system, *Eur. Phys. J. B* 66, 557-561 (2008).
- [20]D. Chen, **L. Lü***, M.-S. Shang, Y.-C. Zhang, T. Zhou, Identifying influential nodes in complex networks, *Physica A* 391, 1777-1787 (2012).
- [21]W. Zeng, Y.-X. Zhu, **L. Lü**, T. Zhou, Negative ratings play a positive role in information filtering, *Physica A* 390, 4486-4493 (2011).
- [22]Z. Ge, Z.-K. Zhang, **L. Lü**, T. Zhou, N. Xi, How altruism works: An evolutionary model of supply networks, *Physica A* 391, 647-655 (2012).
- [23]Q.-M. Zhang, M.-S. Shang, **L. Lü***, Similarity-Based Classification in Partially Labeled Networks, *Int. J. Mod. Phys. C* 21, 813 (2010).
- [24]W. Zeng, M.-S. Shang, Q.-M. Zhang, **L. Lü***, T. Zhou, Can Dissimilar Users Contribute to Accuracy and Diversity of Personalized Recommendation? *Int. J. Mod. Phys. C* 21, 1217 (2010).
- [25]**L. Lü**, Y. G. Wang, Improvement of Market welfare with service of Merchant, *Journal of Harbin Institute of Technology (New series)*, Vol.15, Sup.1, 2008. (EI)
- [26]**L. Lü**, T. Zhou, Role of Weak Ties in Link Prediction of Complex Networks, In the proceeding of the 18th ACM Conference on Information and Knowledge Management (ACM, New York, 2009).
- [27]Q.-M. Zhang, M.-S. Shang, W. Zeng, Y. Chen, **L. Lü***, Empirical comparison of local structural similarity indices for collaborative-filtering-based recommender systems, *Physics Procedia* 3, 1887 (2010).
- [28]**L. Lü***, Link Prediction on Complex Networks (in Chinese), *Journal of University of Electronic Science and Technology of China* 39(5), 651 (2010).
- [29]**L. Lü**, J.-A. Lu, Z.-K. Zhang, X.-Y. Yan, Y. Wu, D.-H. Shi, H.-P. Zhou, J.-Q. Fang, T. Zhou, Looking into Complex Networks (in Chinese), *Complex Systems and Complexity Science* 7(2-3), 173 (2010).
- [30]H.-K. Liu, **L. Lü**, T. Zhou, Uncovering the network evolution mechanism by link prediction (in Chinese). *Sci Sin Phys Mech Astron* 41, 816 - 823 (2011). doi: 10.1360/132010-922
- [31]Y.-X. Zhu, **L. Lü***, Evaluation Metrics for Recommender Systems, *Journal of University of Electronic Science and Technology of China* 41(2), 163-175 (2012).