

# Lionel Tabourier - Curriculum Vitæ

## Contact Information :

LIP6, Sorbonne Université  
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**Current situation (since 2014) : Associate Professor in Computer Science**  
*Complex Networks* team, LIP6, Sorbonne Université (previously UPMC) / CNRS

## Career :

- since 2018** *Complex Networks* team leader.  
**2018** *Habilitation à Diriger les Recherches* - national diploma to supervise PhD students.
- 2012-2014** **Post-Doc** in Applied Maths at the naXys (University of Namur).  
**2011-2012** **Post-Doc** in Computer Science at the LIP6,  
University Pierre et Marie Curie (UPMC), Paris 6.
- 2010-2011** **Teaching Assistant** (ATER) in Computer Science at the LIP6 (UPMC).  
**2009-2010** **Engineer** at the CRÉA (École Polytechnique) for *Webfluence* research project.  
**2006-2010** **PhD preparation** supervised by Hugues Chaté (SPEC, CEA) :  
“Comparison method of complex graphs topologies applied to social networks analysis”.
- 2006-2009** **Trainee Teaching Assistant** in Physics at Pierre and Marie Curie University.
- 2006** Research internship at the LIAFA (CS laboratory of Paris 7 University) :  
(April to July) Analysis of social networks periphery (supervisor : Christophe Prieur)  
**2004** Research internship at the LPS (Statistical Physics Laboratory of the ENS Paris) :  
(May to July) Road traffic modeling (supervisor : Cécile Appert-Rolland)  
**2003** Research internship at the Seismology Laboratory of the IPGP :  
(June to July) Crack speed in earthquakes (supervisor : Pascal Favreau).

## Education :

- 2010** PhD Defense, UPMC.  
**2006-2009** Master’s degree in history and philosophy of science at Paris 7 University.  
**2005-2006** Master’s degree in statistical physics at the ENS Lyon.  
**2005** Passed the *Agrégation de physique*.  
**2004-2005** Training for the *Agrégation de physique* - national physics teaching qualification.  
**2002-2004** Bachelor’s Degree in general physics at the ENS Lyon.  
**2002** Admitted to the École Normale Supérieure de Lyon.  
**1999-2002** Preparatory school in physics - for the competition for the “Grandes Écoles”.

## Publications :

- **International Journals :**

- **Characterizing and predicting mobile application usage**

K.W. Lim, S. Secci, L. Tabourier and B. Tebbani.

*Computer Communications*, 2016.

- **Predicting links in ego-networks using temporal information**

L. Tabourier, A.S. Libert and R. Lambiotte.

*EPJ Data Science*, 2016.

- **Burstiness and spreading on temporal networks.**

R. Lambiotte, L. Tabourier and J.C. Delvenne.

*European Physical Journal B*, 2013.

- **Internal links and pairs as a new tool for the analysis of bipartite complex networks.**

O. Allali, L. Tabourier, C. Magnien and M. Latapy.

*Social Network Analysis and Mining*, 2013.

- **Firm-network characteristics and economic robustness to natural disasters.**

F. Henriët, S. Hallegatte and L. Tabourier.

*Journal of Economic Dynamics and Control*, 2012.

- **Intrinsically dynamic communities from evolving, directed network data.**

B. Mitra, L. Tabourier and C. Roth.

*Computer Networks*, 2012.

- **Generating constrained random graphs using multiple edge switches.**

L. Tabourier, C. Roth and J.P. Cointet.

*Journal of Experimental Algorithmics*, 2011.

- **Directedness of information flow in mobile phone communication networks.**

F. Peruani and L. Tabourier.

*PLoS ONE*, 2011.

- **Citations among blogs in a hierarchy of communities : method and case study.**

A. Salah Brahim, B. Le Grand, L. Tabourier and M. Latapy.

*Journal of Computational Sciences*, 2011.

- **International Conferences and Workshops :**

- **Ego-betweenness centrality in link streams.**

M. Ghanem, F. Coriat, L. Tabourier.

Proceedings of *SNA A (workshop ASONAM 2017)*.

- **Combining structural and dynamic information to predict activity in link streams.**

T. Arnoux, L. Tabourier and M. Latapy.

Proceedings of *FAB 2017*.

- **Impact of temporal features of cattle exchanges on the size and speed of epidemic outbreaks.**

A. Payen, L. Tabourier and M. Latapy.

Proceedings of *ICCSA 2017*, Agricultural and Environmental Big Data Analytics session.

- **RankMerging : Learning to rank in large-scale social networks.**

L. Tabourier, A.S. Libert and R. Lambiotte.

Proceedings of *DyNak II (workshop PKDD 2014)*.

- **A data-driven analysis to question epidemic models for citation cascades on the blogosphere.**

A. Salah Brahim, L. Tabourier and B. Le Grand.

Proceedings of *ICWSM 2013*.

- **How to detect causality effects on large dynamical communication networks.**

L. Tabourier, A. Stoica and F. Peruani.

Proceedings of *Comsnets 2012*.

- **National Journals :**

- **Génération de graphes aléatoires par échanges multiples d'arêtes.**

L. Tabourier, J.P. Cointet and C. Roth.

*Journal de la Société Française de Statistique*, 2017.

- **National Conferences and Workshops :**

- **RankMerging : Apprentissage supervisé de classements pour la prédiction de liens dans les grands réseaux sociaux.**

L. Tabourier, A.S. Libert and R. Lambiotte.

Proceedings of *EGC 2015*.

- **Cycles in hypergraph-based networks : signal or noise, artefacts or processes ?**

L. Tabourier, J.P. Cointet and C. Roth.

Proceedings of *Algotel 2008*.

## Miscellaneous scientific activities :

- **Projects and fundings :**
  - \* **Algodiv** (2016-2019) National Research Agency project : LIP6 Principal Investigator Information Diversity and Algorithmic Recommendation
- **Research supervisions :**
  - \* **Phd students :**
    - Aurore Payen (2015-2018), co-supervision with Matthieu Latapy (LIP6).
    - Thibaud Arnoux (2015-2018), co-supervision with Matthieu Latapy (LIP6).
  - \* **Graduate students :**
    - Cyril Malbranke (April-August 2018), co-supervision with Jean Creusefond (Delight).
    - Sylvain Ung (February-August 2018), co-supervision with Pedro Ramaciotti (LIP6).
    - Yekta Kesenci (May-August 2017), co-supervision with Christophe Prieur (Télécom Paris-Tech).
    - Berrenur Saylam (February-June 2016), co-supervision with Raphaël Fournier-S'niehotta (CNAM).
    - Illya Gorodensky (March-August 2015), co-supervision with Anne Fladenmuller (LIP6).
    - Clément Gastaud (May-July 2015).
  - \* **Undergraduate students :**
    - Grégoire Uhlrich-Meunier (June-July 2016).
    - Maxime Savaro (June-July 2012).
- **Reviewing activities :**
  - \* **International Journals :** ANS, Computer Communications, Computer Networks, CSON, J. Complex Networks, J.R.Soc.Interface, JSAC, KAIS, Physica A, PLoS ONE, TCS, TKDD, TPDS.
  - \* **International Conferences :** NetSciCom 2011, WWW (2012, 2014, 2015).
  - \* **Jury** of the Frank Callier Award 2014 (Master dissertation award).
  - \* **Expertise** for the ANR 2013 (National Research Agency founding program).
- **Conference presentations :**
  - \* *11th Workshop on Complex Evolving System Approach in Economics*, Nice (France), October 2017.
  - \* *EGC 2015*, Luxemburg, January 2015.
  - \* *DyNakII (ECML-PKDD 2014 satellite)*, Nancy (France), September 2014.
  - \* *TNETS'13 (ECCS 2013 satellite)*, Barcelona (Spain), October 2013.
  - \* *AAAI ICWSM 2013*, Cambridge (United States), July 2013.
  - \* *Journées Automnales ResCom*, Paris (France), November 2012.
  - \* *IEEE COMSNETS 2012*, Bangaluru (India), January 2012.
  - \* *NetMob 2011*, Cambridge (United States), October 2011.
  - \* *DOOCN V (ECCS 2011 satellite)*, Vienna (Austria), September 2011.
  - \* *DOOCN III (ECCS 2009 satellite)*, Warwick (England), September 2009.
  - \* *Algotel'08*, Saint-Malo (France), May 2008.
- **Invited seminars :**
  - \* *Takemura-Masuda Laboratory*, University of Tokyo (Japan), June 2013.
  - \* *naXys*, University of Namur (Belgium), October 2012.
  - \* *SAMM*, University Paris 1 Panthéon-Sorbonne (France), April 2012.
  - \* *ICTEAM*, Catholic University of Louvain (Belgium), March 2012.
  - \* *Centre de Physique Théorique*, University of Aix-Marseille (France), November 2011.
  - \* *Max Planck Institute for the Physics of Complex Systems*, Dresden (Germany), July 2011.
  - \* *LIP6*, University Paris 6 Pierre and Marie Curie, June 2010.
- **Scientific Visits :**
  - \* *Takemura-Masuda Laboratory*, University of Tokyo, Japan, June 2013.
  - \* *Max Planck Institute for the Physics of Complex Systems*, Germany, July 2011.
- **Softwares :** see <http://lioneltabourier.fr/program.html>
  - \* Source codes and user guide for *K-edge switching*, random graph with given properties generator.
  - \* Source codes and user guide for *RankMerging*, supervised learning method for link prediction.

- **Conference Organization and Program Committee Participations :**
  - \* EUSN 2016 : co-organizer of the workshop on Large Networks.
  - \* Scientific committee member : Colloque Unix en Europe (2017).
  - \* PC member : COMSNETS 2016, Social Networking workshop (COMSNETS 2017), OSNEM 2018.
- **Seminar Organization :**
  - \* Codes Sources (2014-2018) : <http://codesource.hypotheses.org/>
  - \* Complex Networks team (2011-2012) : <http://www.complexnetworks.fr/events/>
- **Popular science :** “*Le risque épidémique dans les sociétés contemporaines*”, article in French (Prisme à Idées, vol. 4).
- **Philosophy of science :** “*Caractériser l’analogie entre automates cellulaires déterministes et systèmes physiques*”, article in French, *Lato Sensu, revue de la Société de philosophie des sciences*, 2018.

## Teaching activities :

Subject	Level	Where	Hours	When
Network Structure and Dynamics	Graduate	Sorbonne Université	120hrs	2014-2018
Complex Networks Synchronization	Graduate	Namur University	28hrs	2012
Large Interaction Networks	Graduate	Paris 7 University	16hrs	2012
Complex Networks	Graduate	Ho-Chi-Minh City Univ.	36hrs	2011
Complex Networks	Graduate	Sorbonne Université	18hrs	2010
Introduction to Complex Networks	Undergraduate	Babes-Bolyai University	10hrs	2017
Basic Programming in C	Undergraduate	Sorbonne Université	32hrs	2017
Programming Environment	Undergraduate	Sorbonne Université	55hrs	2016-2017
Algorithmics	Undergraduate	Sorbonne Université	95hrs	2015-2018
Introduction to Databases	Undergraduate	Sorbonne Université	19hrs	2015
Basic Programming in Python	Undergraduate	Sorbonne Université	232hrs	2014-2018
Graph Theory	Undergraduate	Namur University	56hrs	2012-2013
Programming in C	Undergraduate	Sorbonne Université	40hrs	2011
Academic Tutoring	Undergraduate	Sorbonne Université	40hrs	2011,2014
Programming in Scheme	Undergraduate	Sorbonne Université	104hrs	2010
Career Guidance	Undergraduate	Sorbonne Université	63hrs	2014-2016
Thermodynamics	Undergraduate	Sorbonne Université	60hrs	2008
Optics	Undergraduate	Sorbonne Université	12hrs	2008
Physics for Medical Studies	Undergraduate	Sorbonne Université	60hrs	2007
Mechanics	Undergraduate	Sorbonne Université	60hrs	2006