

# Lionel Tabourier - Curriculum Vitæ

## Contact Information :

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

## Career :

- 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 *SNAAs (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 :** Computer Communications, Computer Networks, CSON, 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 :** article in French on epidemic risks (Prisme à Idées, vol. 4).

## Teaching activities :

UPMC : University Pierre and Marie Curie (Paris 6)

| Subject                          | Level         | Where                   | Hours  | When      |
|----------------------------------|---------------|-------------------------|--------|-----------|
| Network Structure and Dynamics   | Graduate      | UPMC                    | 80hrs  | 2014-2016 |
| 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      | UPMC                    | 18hrs  | 2010      |
| Introduction to Complex Networks | Undergraduate | Babes-Bolyai University | 10hrs  | 2017      |
| Basic Programming in C           | Undergraduate | UPMC                    | 32hrs  | 2017      |
| Programming Environment          | Undergraduate | UPMC                    | 55hrs  | 2016-2017 |
| Algorithmics                     | Undergraduate | UPMC                    | 78hrs  | 2015-2016 |
| Introduction to Databases        | Undergraduate | UPMC                    | 19hrs  | 2015      |
| Basic Programming in Python      | Undergraduate | UPMC                    | 192hrs | 2014-2017 |
| Career Guidance                  | Undergraduate | UPMC                    | 42hrs  | 2014-2015 |
| Graph Theory                     | Undergraduate | Namur University        | 56hrs  | 2012-2013 |
| Programming in C                 | Undergraduate | UPMC                    | 40hrs  | 2011      |
| Academic Tutoring                | Undergraduate | UPMC                    | 40hrs  | 2011,2014 |
| Programming in Scheme            | Undergraduate | UPMC                    | 104hrs | 2010      |
| Thermodynamics                   | Undergraduate | UPMC                    | 60hrs  | 2008      |
| Optics                           | Undergraduate | UPMC                    | 12hrs  | 2008      |
| Physics for Medical Studies      | Undergraduate | UPMC                    | 60hrs  | 2007      |
| Mechanics                        | Undergraduate | UPMC                    | 60hrs  | 2006      |