Lionel Tabourier - Curriculum Vitæ

Contact Information:
LIP6, Sorbonne Université
4 Place Jussieu, 75005 Paris
lionel.tabourier@lip6.fr

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.
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
    *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.
  - 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.
  - 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.
  - Citations among blogs in a hierarchy of communities : method and case study.
    *Journal of Computational Sciences*, 2011.

- **International Conferences and Workshops** :
  - Ego-betweenness centrality in link streams.
    M. Ghanem, F. Coriat, L. Tabourier.
    Proceedings of *SNAA (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.
- 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.

- 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.
Miscellaneous scientific activities:

- **Projects and fundings:**

- **Research supervisions:**
  - **Phd students:**
  - **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 ParisTech).
    - Berrenur Saylam (February-June 2016), co-supervision with Raphaël Fournier-S’niehotta (CNAM).
    - Illya Gorodenskyy (March-August 2015), co-supervision with Anne Fladenmuller (LIP6).
  - **Undergraduate students:**
    - Grégory Uhlrich-Meunier (June-July 2016).
    - Maxime Savaro (June-July 2012).

- **Reviewing activities:**
  - **Jury** of the Frank Callier Award 2014 (Master dissertation award).
  - **Expertise** for the ANR 2013 (National Research Agency founding program).

- **Conference presentations:**
  - **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.
  - **IEEE COMSNETS 2012**, Bangaluru (India), January 2012.
  - **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](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).

• Seminar Organization:
  • 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).


Teaching activities:

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