
Jean-Loup Guillaume

Contact details

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Education and Professional Experience

- Since 10/2014** **L3i – La Rochelle University** **La Rochelle, France**
 Full professor in Computer Science, Laboratoire Informatique, Image et Interaction
- 09/2007-09/2014** **LIP6 – University Pierre et Marie Curie (Paris 6)** **Paris, France**
 Associate professor in Computer Science, Complex Networks team.
 « **Habilitation à diriger les recherches** » in computer science - 19/11/2012. « Déterminisme et non-déterminisme au service de la détection de communautés dynamiques ». Committee: N. Hanusse, B. Jouve, P. Van Dooren, J. Gustedt, J.-F. Marcotorchino, M. Soria and E. Viennet.
- 11/2006-08/2007** **INMA – Université Catholique de Louvain** **Louvain-la-Neuve, Belgium**
 Postdoc (10 months), supervised by Vincent D. Blondel.
 Subject: Diffusion and communities in large networks.
- 08/2006-10/2006** **ARES Project – INRIA Rhône-Alpes** **Lyon, France**
 Postdoc (3 months), supervised by Eric Fleury.
 Subject: Dynamics of contacts in sensor networks.
- 12/2004-05/2006** **France Télécom R&D** **Issy-les-Moulineaux, France**
 Postdoctoral (18 months), supervised by Houssein Assadi.
 Subject: Diffusion of innovations in communication networks.
- 2001-2004** **LIAFA – Université Denis Diderot (Paris 7)** **Paris, France**
 Ph.D. candidate in computer science, supervised by Matthieu Latapy.
 Ph.D. in computer science - 20/12/2004. « Analyse statistique et modélisation des grands réseaux d'interaction ». Committee: S. Boucheron, S. Fdida, E. Fleury, P. Fraigniaud, M. Habib and M. Latapy.
- 2000-2001** **ENS Cachan** **Paris, France**
 Pre-doctorate diploma (DEA) in Algorithmic, supervised by Michel Morvan and Laurent Viennot.
- 06/2000** **ENS Cachan** **Cachan, France**
 Admitted as a 3rd year student in the "Ecole Normale Supérieure de Cachan", computer science dept.
- 1998-2000** **ENSEEIH** **Toulouse, France**
 Student at the ENSEEIH Engineering school. Two years computer science cursus. Graduated with honors.
- 1994-1998** **Université Bordeaux I** **Bordeaux, France**
 Master's degree in computer science. Graduated with honors.

Distinctions

- 2015-2019, 2020-...: Owner of PEDR (La Rochelle University).**
- 10/2011-09/2014: Owner of the *pedagogic investment prize* (Sorbonne University).**
- 10/2009-09/2014: Owner of the *research investment prize* (Sorbonne University).**

Scientific animation

Participation in funded projects

In progress

- 2023-...: Member of the regional R3MOB project.
- 2022-2024: Member of the « Plan de relance » ANR project with RMD Technologies (Développement de nouvelles capacités technologiques afin d'affiner les prévisions de demande, de comprendre et d'anticiper ce que veulent les touristes). L3i, RMD Technologies. Budget 345k€.
- 2022-2025: Member of the ANR SmartFCA project (Analyse Formelle de Concepts : un outil intelligent pour l'analyse de données complexes), LIRMM, LORIA, ICube, IRISA, Infologic R&D Lyon, L3i. Budget 878k€ (115k€ L3i).

Former projects

- 2021-2023: Member of the regional project Ecomob, CEREGE LRUUniv, IRGO Bordeaux, L3i LRUUniv, INRIA Bordeaux.
- 2020-2023: Member of the MITIK ANR project (Mobility and contact traces from non-intrusive passive measurements), INRIA Saclay, LIP6, L3i. Budget 594k€ (200k€ L3i).
- 2023: Member of two local project (ACI) – bluebility (urBan coastaL sUstainable moBILITY lab); Evaluation of the participation of the social network Instagram in the over-visitation of coastal tourist areas.
- 2019-2022: Associate member of the LiMass ANR JCJC project (Linear Algorithms for Massive Real-World Graphs).
- 2018-2022: Member of the SAIL ANR labcom (Sequential Art Image Laboratory), L3i – actualuna.
- 2016-2018: Member of the FEDER project Gedycrism (Dynamic management of crisis and major risks), L3i – Systel.
- 2014-2017: **Project leader** of CODDDE (Evolving communities, Diffusion and Event Detection) – ANR CONTINT, LIP6 – LIP – linfluence. 2014-2017: REQUEST (REcursive QUery and Scalable Technologies) – 3rd call FSN « Informatique en nuage - Cloud computing ».
- 2014-2017: **French side leader** of Indo-French project with IIT Kharagpur (CNeRG). CEFIPRA Targeted Program.
- 2011-2014: CLEAR lab (Centre for Learning and Retrieval) UPMC–Thales.
- 2011-03/2014: DYNGRAPH (Dynamics of Graph Topologies) – ANR JCJC.
- 2008-2012: LIP6 cluster – Project leader – BQR Equipment UPMC.
- 2010-2011: DyVi (Large graphs visualization) – ARC INRIA.
- 2008-2010: WEBFLUENCE (Opinion dynamics in virtual arenas: topology, morphogenesis and diffusion) – ANR SYSCOMM.
- 2008-2010: FRAGRANCE (Filtering, Retrieval and Tagging in Social Interaction Graphs) – ANR CONTINT.
- 2008-2010 : STIC-AMSUD 09STIC04 Dynamics of Layered Complex Networks.
- 2007-2010: MAPE (Maps of paedophile activity) – ANR TlCOM.
- 2007-2009: MAPAP (Measurement and Analysis of P2P activity Against Paedophile content) – Safer Internet Plus Program (European union) SIP-2006-PP-221003.
- 2004-2007: METROSEC (Metrology for Security and QoS) – ACI Sécurité et Informatique.

Scientific responsibilities

Management of the research

- 2021: director of the « models and knowledge » L3i team.
- 2016-2020, 2020-2021: Elected member of the Education Council (CFVU), La Rochelle University.
- 2015-...: Member of the RESCOM Committee.
- 2014-2020: L3i Scientific guide, interactivity and system dynamics research theme until 06/2016, Formal models theme since.
- 2014-2017: **Leader of the RNSC** (National Network on Complex Systems) – 6 partners (IRSTEA, CIRAD, IFREMER, INRA, INRIA, IRD) and 1025 researchers involved.
- 2012-2014: Member of the CNU (Conseil National des Universités) 27th section (computer science).
- 2011-2014: Member of the laboratory council of LIP6.

- 2007-2009: Associated researcher of the Université Catholique de Louvain.

PC Member

- 2016-2023: Intl. Conf. on Complex Networks and their Applications (Complex Networks) – Italy'16, France'17, Cambridge'18, Lisbon'19, Madrid'20, Madrid'21, Palermo'22, France'23.
- 2019-2020: Intl. Conf. on Complexity, Future Information Systems and Risk (Complexis) – Greece'19, Czech Republic'20.
- 2014-2019: Intl. Conf. on Research Challenges in Information Science (RCIS) – Morocco'14 (conf + doctoral consortium), Greece'15, France'16, UK'17, France'18, Belgium'19.
- 2015-2016, 2018: World Wide Web Conference (WWW), Italy'15 (poster track), Canada'16 (poster track), France'18 (MATNet workshop).
- 2011, 2016, 2018 : Francophone conference on algorithmic aspects of telecommunications (Algotel).
- 2016-2018: Intl. Conf. on Complexity, Future Information Systems and Risk (Complexis) – Italy'16, Portugal'17, Portugal'18.
- 2017: **co-chair** of the “social networking workshop” in conjunction with COMSNETS – India.
- 2016-2017: Intl. wksp. on Dynamics in Networks (DyNo) – USA'16, Macedonia'17.
- 2012-2017: Conference on Complex Networks (CompleNet) – Florida'12, Berlin'13, Bologna'14, New York'15, France'16, Croatia'17.
- 2016: 4th Intl. wksp. on Big Data and Social Networking Management and Security (BDSN) – Spain.
- 2016: IEEE Workshop on Network Science for Communication Networks (NetSciCom) in conjunction with IEEE INFOCOM 2016.
- 2016: 6th Intl. Conf. on Web Intelligence, Mining and Semantics (WIMS'16).
- 2014-2016: Intl Conf. on Computational Aspects of Social Networks (CASoN) – Portugal'14, South Africa'15, India'16.
- 2012-2016: Conférence sur les modèles et l'analyse des réseaux (MARAMI).
- 2015: **PC chair** of MARAMI 2015.
- 2012-2015: SITIS satellite Workshop on Complex Networks and their Applications.
- 2014: PC of Rescom Thematic school on “network science” – Furiani, France.
- 2014: Extraction et Gestion de Connaissances (AFGG-EGC) – Rennes, France.
- 2013: Intl Conf. on Computer Systems and Applications (AICCSA) – Fes, Morocco.
- 2009: Intl Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS Mobility and Dynamic Networks satellite workshop) – Lyon, France.

Reviewer or evaluation activities

- 2024: Member of a selection committee for a full professor in CS, LIRIS – INSA, Lyon.
- 2023: Member of a selection committee for a full professor in CS, IRIT, Université de Toulouse.
- 2021: Member of two selection committee for a full professor in CS, LaBRI, Université de Bordeaux.
- 2021: President of a selection committee for an associate professor in CS, L3i, La Rochelle Université.
- 2016-2021: Evaluations for the HCERES (members of 1-2 committee/year + external evaluations)
- Regular reviewer for many journals : SNAM, Social Science Research, Transactions on Mobile Computing, Computer Networks, IJWBC, JDIR, JNCA, JSTAT, KAIS, Physica A, PLoS ONE, The Computer Journal, Transactions on Mobile Computing, Computational Intelligence.
- 2020: President of a selection committee for an associate professor in CS, L3i, La Rochelle Université.
- 2019: Evaluation of one NSERC project (Canada)
- 2018: member of selection committee for a full professor in CS, LIRIS – INSA, Lyon.
- 2018: member of ANR CE23 (Big Data) evaluation committee.
- 2015-2017: Evaluations for the ANR, generic and JCJ call.
- 2014: Evaluation of one project from CNRS-INRIA-CEFIPRA 2014 Info-French Program.
- 2014: Evaluation of the Yachay University project (teaching and research activities), Ecuador.
- 2013: Evaluations of FNRS projects, Belgium.
- 2012: Evaluation of CRA (Concerted Research Actions), Belgium.

Publications

- 17 international journals.
- 23 international conferences and 13 international workshops with proceedings.
- 2 invited papers in international conferences.
- 8 book chapters (including 4 in French).

- 1 national journal, 14 national conferences and 3 national workshops.
- 1 popular work.

Invited Talks

Invited talks in international conference, workshops or thematic school

- Dynamics on and of complex network (2020 – virtual conference)
- Summer School on Data Science for Document Analysis and Understanding (2018 – France)
- Data Science Spring School (2017 – Tianjin, China)
- Machine Learning and Complex Networks school and workshop (2015 – Kharagpur, India).
- Dynamics on and of complex networks III (2009 – UK).
- Workshop Detection and visualization of communities in large complex networks (2008 – Belgium).
- NATO workshop Mining Massive Data Sets for Security (2007 – Italy).
- 12th CTN Wksp Network & Coalition Formation among Heterogeneous Agents (2007 – Belgium).
- Cosin conference (2003 – Italy).

Invited talks in national conference, workshops or thematic school

- Workshop Data Science (06/2016 – Lyon).
- Thematic school RESEM "Etudier les réseaux sociaux : espaces, mobilités" (09/2015 - Oléron)
- 22èmes rencontres de la Société Francophone de Classification (09/2015 – Nantes).
- Interdisciplinary program MOREHIST (06/2015 – Toulouse).
- GDR RO thematic day "Optimization in Complex Networks" (11/2014 – Paris).
- Workshop "Social Network Analysis in Animal Societies" (07/2013 – Strasbourg).
- Thematic school on complex systems (10/2012 – RISC-E Rennes).
- Thematic day on graph dynamics (07/2012 – ISC-PIF Paris).
- French Complex Systems Summer School (10/2011 – Paris).
- ResCom thematic school (06/2011 – La Palmyre).
- Journée Soc. Fr. de Statistiques : Réseaux sociaux, analyse et data mining (02/2010 – Paris).
- Journées Franciliennes de Recherche Opérationnelle (2006 – Paris).

Invited talks in seminars outside France

- Seminar of the research group "Large Graphs and Networks", UCL (2006, 2007, 2008 – Belgium).
- Seminar of the Centre for Systems Engineering and Applied Mechanics (2007 – Belgium).
- Seminar "Dipartimento di Informatica e Sistemistica" (2006 – Italy).
- Cost 295 Dynamo meeting (2005 – Poland).

Invited talks in seminars in France (a selection)

- LIG/AMA (2014), LaBRI/MaBioVis (2014), LERIA (2014), LINA (2014), LaBRI (2013), IRISA (2013), CITI Labs (2013) L3i (2010), LIP6/NPA (2005 & 2007), LORIA/Madynes (2007), CITI (2006), Labri/Algorithmique distribuée (2006), IGM (2003), etc.

Ph.D. and HDR Defense Committee

- Julie Queiros (Université de Nantes) – evaluation – 10/2024
- Effrosyni Papanastasiou (Sorbonne Université) – evaluation – 07/2024
- Thibault Prouteau (Le Mans Université) – committee member – 07/2024
- Jérémy Richard (La Rochelle Université) – president of the committee – 05/2023
- Safa El Ayebe (ENSICAEN & Orange Labs) – president of the committee – 05/2023
- Justin Loye (IRIT, Université de Toulouse) – committee member – 12/2022
- Jérémy Richard (Univ. La Rochelle) – committee member – 12 /2022
- Quentin Lutz (Inst. Polytechnique de Paris & Nokia) – president of the committee – 02/2022
- Avirup Saha (CnerG – IIT Kharagpur – India) – evaluation – 12/2021
- Mohamed Benabdelkrim (Univ. Lyon & INSA Lyon) – evaluation – 12/2021
- Thibaud Trolliet (Univ. Côte d'Azur) – evaluation – 06/2021
- HDR – Vincent Labatut (Univ. Avignon) – evaluation – 06/2021
- HDR - Ines El Korbi (ISI Tunis) – president of the committee – 03/2021
- Damien Mondou (La Rochelle Université) – president of the committee – 12/2019
- Armel Jacques Nzekon Nzeko'o (Sorbonne Univ. & Univ de Yaoundé 1) – evaluation – 12/2019

- Didier Henry (Univ. des Antilles) – evaluation – 12/2018
- Sabrine Mallek (Univ. D’Artois & Univ. De Tunis) – president of the committee – 07/2018
- Antoine Hinge (Univ. de Bordeaux) – evaluation – 06/2018
- Koustav Rudra (CnerG – IIT Kharagpur – India) – evaluation – 01/2018
- Mael Canu (UPMC – LIP6) – evaluation – 12/2017
- Valeria Romano (IPHC Strasbourg) – evaluation – 09/2017
- Matteo Morini (ENS Lyon) – evaluation – 09/2017
- Jean-François Viaud (Univ. La Rochelle) – committee member – 08/2017
- HDR – Mauro Sozio (TelecomParisTech) – evaluation – 07/2017
- Oana Balalau (TelecomParisTech) – evaluation – 05/2017
- Junaid Ahmed Khan (Univ. Marne la Vallée) – evaluation – 10/2016
- Noé Gaumont (UPMC – LIP6) – committee member – 10/2016
- Claire Lagesse (Univ. Paris Diderot) – committee member – 10/2015
- Fragkiskos Malliaros (Ecole Polytechnique) – evaluation – 09/2015
- Lucie Martinet (ENS de Lyon) – evaluation – 09/2015
- Mahdi Meslmawy (Univ. Le Havre) – evaluation – 09/2015
- Nicolas Dugué (Université d’Orléans) – evaluation – 06/2015
- The Dang Huynh (INRIA-Rocquencourt) – evaluation – 06/2015
- Blaise Ngonmang (Univ. Paris 13 – L2TI) – evaluation – 11/2014
- Nicolas Tremblay (ENS Lyon) – evaluation – 10/2014
- Patricia Condé Cespedes (UPMC - LSTA) – committee member – 12/2013
- Olivier Gach (Univ. Angers – LERIA) – evaluation – 12/2013
- Yann Jacob (UPMC – LIP6) – president of the committee – 09/2013
- Rémy Cazabet (Univ. Toulouse 1 – IRIT) – evaluation – 03/2013
- Mauricio Soto (Univ. Paris Diderot – LIAFA) – committee member – 12/2011
- Cristobald de Kerchove (Univ. Catholique de Louvain, INMA) – evaluation – 08/2009
- Mid. term Ph.D. evaluation: Mael Canu (UPMC – LIP6, 12/2014), Blaise Ngonmang (Univ. Paris 13 – L2TI, 04/2013), The Anh Dang (Univ. Paris 13 – L2TI, 03/2012), John Whitbeck (UPMC – LIP6, 10/2010)

Organization tasks

- 2024: Co-Organizer of PFIA 2024 – La Rochelle, France, 07/2024
- 2021: Co-Organizer of Algotel 2021 – La Rochelle, France, 06/2021.
- 2017: Organizing chair of Marami 2017 – La Rochelle, 10/2017.
- 2014: Co-Organizer of Marami 2014 – Paris, 10/2014.
- 2005: Co-Organizer of Algotel 2005 – Presqu’île de Giens, France, 05/2005.
- 2005: Co-Organizer and member of the scientific committee of the school on complex networks. – Paris, France, 04/2005.
- 2004: Co-Organizer of the thematic symposium on social networks of the Internet – Paris, France.
- 2004: Co-Organizer of the first national conf on Graphs, Networks and Modeling – Paris, France.
- 2002-2004: Local organizer of the Graphs, Networks and Modeling seminar.
- 2001: Co-Organizer of the One day conference on dynamics graphs and Web graph – Paris, France.

Teaching and students

Since 10/2014: Full Professor at ULR

- 2015-2021: Head of the computer science master’s degree in computer science, University of La Rochelle.
3h (course)

2007-2014: associate professor at UPMC

- Head of the L2 ATIC (Applications des Technologies de l’Information et de la Communication) – second semester 2010-2011.
- 2008-2014: member of the selection committee for the “Networks Master” UPMC (~100 applications to evaluate per committee member every year).

- 2012-2014: member on the habilitation committee for the master of Computer Science, UPMC.

Ph.D. students

Since 10/2023

Marc-Alexis Azais (Cifre RMD Technologies): Advisor (100%) with the scientific support of Mickael Coustaty. Analyse multifactorielle de données de réservations pour prédire la charge future des destinations.

Since 10/2021

Imane Taleb: Advisor (100%) with the scientific support of Benjamin Duthil. Analyse de l'efficacité énergétique d'applications basées sur des micro-services.

2021-2024 (defense 04/03/2024)

Edward Giamphy (Cifre Preligens): Advisor (100%) with the scientific support of Antoine Doucet. Détection dynamique d'événements géopolitiques par fouille de données en sources ouvertes.

2020-2023 (defense 13/12/2023)

Antoine Huchet: Co-advisor (50%) with Yacine Ghamri-Doudane. Inferring user trajectories from non-intrusive passive measurements.

2022-2023 (defense 30/08/2023)

Thomas Chambon: Co-advisor (70%, in replacement of Arnaud Revel during the last year) with Jeanne Lallement. Effets de la complexité de l'information sur les intentions et les comportements de mobilité urbaine : construction d'un outil d'aide au changement de comportement.

2016-2021 (defense 06/07/2021)

Noudéhouéno Houssou: Co-advisor (50%) with A. Prigent. Analysis and modeling of user trajectories in real systems.

2016-2019 (defense 16/12/2019)taeb

Thanh Khoa Nguyen: Co-advisor (50%) with M. Coustaty. Segmenting characteristics elements of documents with graphs of communities.

2014-2018 (defense 12/10/2018)

Raphael Tackx: Co-advisor (30%) with F. Tarissan. Analysis and modeling of the multipartite structure of complex networks.

2011-2015 (defense 15/06/2015)

Maximilien Danisch: Co-advisor (50%) with B. Le Grand: Ego centered community structure in complex networks.

2011-2014

Alice Albano: Co-advisor (50%) with B. Le Grand. Complex networks dynamics: an analysis in extrinsic time.

2009-2012

Massoud Seifi: Co-advisor (80%) with M. Latapy. Multi-scale analysis and visualization of complex networks.

2008-2011

Thomas Aynaud: Co-advisor (80%) with M. Latapy. Community detection in evolving networks.

Postdoctoral fellows

2017-2018 Roberto Interdonato (ULR): social media mining for crisis management and event detection.

2014-2015 (3m) Alice Albano (UPMC): conception of a software for the simulation of diffusion on evolving networks.

2014 Yann Jacob (UPMC in collaboration with Univ Paris 1 and Rexel): Client and products segmentation.

2013-2014 François Queyroi (UPMC): Link streams for evolving community detection.

2012-2013 Romain Campigotto (UPMC): Community detection.

Master 2 Interns

- 2014** Issam Bani (UPMC): Analysis of learning and interaction traces in a MOOC.
- 2014** Raphael Tackx (UPMC): Bipartite networks and communities.
- 2014** Marine Levé (UPMC and Univ. Strasbourg): Leadership and influence in wild horse herds.
- 2011** Alice Albano (UPMC): Modeling and simulation of diffusion processes in evolving networks.
- 2008** Massoud Seifi (UPMC): Multi-scale visualization of complex networks.
- 2008** Thomas Aynaud (UPMC): Multi-scale study of complex networks.
- 2007** Etienne Lefebvre (Université Catholique de Louvain): Community detection in complex networks.

Master 1 Interns or equivalent

- 2020** Sidi Mohamed Mohamed Ahmed (M1 La Rochelle University) – may-july, co-advising with A. Revel (50%). Visualisation de graphes dirigés acycliques en Javascript.
- 2020** Maxime Gaiffier (M1 La Rochelle University) – may-july, co-advising with A. Revel (50%). Visualisation adaptative du référentiel de compétences informatiques.
- 2009** Co-advisor of a group of 3 students (UPMC): Capture of P2P traces.
- 2004** Stevens le-Blond (M1 Epitech): Measurements of P2P networks.
- 2004** Samuel Leboeuf (M1 Polytech Grenoble), Jérôme Wrede (M1 ENS de Lyon): Complex networks modeling.
- 2001-2004** 23 M1 students during TER/initiation to research (Univ. P7).

Publication List

International journal with referring process (19)

[IJ19] A survey on bipartite graphs embedding.

Edward Giamphy, Jean-Loup Guillaume, Antoine Doucet, Kevin Sanchis.
Social Network Analysis and Mining 13, 54 (2023).

[IJ18] Information Complexity Ranking: A New Method of Ranking Images by Algorithmic Complexity.

Thomas Chambon, Jean-Loup Guillaume, Jeanne Lallement.
Entropy 2023, 25(3), 439.

[IJ17] An Enhanced Louvain Based Image Segmentation approach using Color Properties and Histogram of Oriented Gradients.

Thanh-Khoa Nguyen, Mickaël Coustaty, Jean-Loup Guillaume.
Communications in Computer and Information Science book series (CCIS, volume 1182), pp 543-565.

[IJ16] A lightweight and multilingual framework for crisis information extraction from Twitter data.

Roberto Interdonato, Jean-Loup Guillaume, Antoine Doucet.
Social Network Analysis and Mining, December 2019, 9:65.

[IJ15] Easy-Mention: A model driven mention recommendation heuristic to boost your tweet Popularity.

Soumajit Pramanik, Mohit Sharma, Maximilien Danisch, Qinna Wang, Jean-Loup Guillaume, Bivas Mitra.
International Journal of Data Science and Analytics (2018), pp1-17, <https://doi.org/10.1007/s41060-018-0121-2>.

[IJ14] Modeling Cascade Formation in Twitter amidst Mentions and Retweets.

Soumajit Pramanik, Qinna Wang, Maximilien Danisch, Jean-Loup Guillaume, Bivas Mitra.
Social Network Analysis and Mining 7(1): 41:1-41:18 (2017).

[IJ13] The Power of Consensus: Random Graphs Still Have No Communities.

Romain Campigotto and Jean-Loup Guillaume.
Lecture Notes in Social Networks 2014, pp 145-164.

[IJ12] Studying Graph Dynamics Through Intrinsic Time Based Diffusion Analysis.

Alice Albano, Jean-Loup Guillaume, Sébastien Heymann, Bénédicte Le Grand.
Lecture Notes in Social Networks, may 2015. pp 103-124.

[IJ11] Multi-egocentered communities in practice.

Maximilien Danisch, Jean-Loup Guillaume, Bénédicte Le Grand.
Social Network Analysis and Mining Journal, 4:180, 2014.

[IJ10] Towards multi-ego-centered communities: a node similarity approach.

Maximilien Danisch, Jean-Loup Guillaume, Bénédicte Le Grand.
International Journal of Web Based Communities, 2013, Vol. 9, No. 3, pp.299-322.

[IJ9] Impact of Random Failures and Attacks on Poisson and Power-Law Random Networks.

Clémence Magnien, Matthieu Latapy, Jean-Loup Guillaume.
ACM Computing surveys, volume 43, issue 3, april 2011.

[IJ8] Fast unfolding of communities in large networks.

Vincent D. Blondel, Jean-Loup Guillaume, Renaud Lambiotte, Etienne Lefebvre.
Journal of Statistical Mechanics: Theory and Experiments (2008) P10008.

[IJ7] Description and simulation of dynamic mobility networks.

Antoine Scherrer, Pierre Borgnat, Eric Fleury, Jean-Loup Guillaume, Céline Robardet.
Computer Networks 52 (2008), pages 2842-2858.

[IJ6] Local leaders in random networks.

Vincent D. Blondel, Jean-Loup Guillaume, Julien M. Hendrickx, Cristobald de Kerchove, Renaud Lambiotte.
Physical Review E 77, 036114 (2008).

[IJ5] Distance distribution in random graphs and application to network exploration.

Vincent D. Blondel, Jean-Loup Guillaume, Julien M. Hendrickx, Raphael Jungers.
Physical Review E 76, 066101 (2007).

[IJ4] Bipartite graphs as models of complex networks.

Jean-Loup Guillaume, Matthieu Latapy.

Physica A 371 (2006) 795-813.

[IJ3] Relevance of Massively Distributed Explorations of the Internet Topology: Qualitative Results.

Jean-Loup Guillaume, Matthieu Latapy, Damien Magoni.

Computer Networks, Volume 50 (2006), Issue 16, pages 3197-3224.

[IJ2] Network Metrology.

Jean-Loup Guillaume, Matthieu Latapy.

Complex Systems, Volume 16 (2005), pages 83-94.

[IJ1] Bipartite Structure of all Complex Networks.

Jean-Loup Guillaume, Matthieu Latapy.

Information Processing Letters (IPL), Volume 90 (2004), Issue 5, Pages 215-221.

Contributed chapters in collective books (8)**[C8] L'étude de l'émergence, de l'organisation et de l'évolution des structures de réseau par l'analyse de réseaux dynamiques (in french).**

Daniel, Charbonneau, Sébastien Sosa, Cristian Pasquaretta, J.L. Guillaume.

Analyse des réseaux sociaux appliquée à l'éthologie et l'écologie, Editions Matériologiques, 2015.

[C7] Modélisation des réseaux sociaux (in french).

Cédric Sueur, Nicolas Perony, Frédéric Amblard, J.L. Guillaume.

Analyse des réseaux sociaux appliquée à l'éthologie et l'écologie, Editions Matériologiques, 2015.

[C6] Multi-ego-centred communities

Maximilien Danisch, Jean-Loup Guillaume and Bénédicte Le Grand

« Complex Networks and their Applications », Cambridge Scholars Publishing, pp 76-111.

[C5] Communities in evolving networks: definitions, detection and analysis techniques.

Thomas Aynaud, Jean-Loup Guillaume, Eric Fleury, Qinna Wang.

In « Dynamics On and Of Complex Networks », Volume 2, 159-200. 2013.

[C4] Multilevel local optimization of modularity.

Thomas Aynaud, Vincent Blondel, Jean-Loup Guillaume, Renaud Lambiotte.

In « Graph Partitioning », Charles-Edmond Bichot, Patrick Siarry (Eds). WILEY & ISTE. 2011.

[C3] Optimisation locale multi-niveaux de la modularité.

Thomas Aynaud, Vincent Blondel, Jean-Loup Guillaume, Renaud Lambiotte.

In « Partitionnement de graphe », Hermès-Lavoisier, Traité IC2.

[C2] Evolving networks.

Jean-Loup Guillaume, Pierre Borgnat, Eric Fleury, Clémence Magnien, Céline Robardet, Antoine Scherrer.

In « Mining Massive Data Sets for Security », NATO Advanced Study Institute, IOS Press, 2008.

[C1] Topologie d'Internet et du Web : mesure et modélisation.

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Antoine Huchet, Jean-Loup Guillaume, Yacine Ghamri-Doudane.

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Vincent D. Blondel, Jean-Loup Guillaume, Renaud Lambiotte, Etienne Lefebvre.

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Eric Fleury, Jean-Loup Guillaume, Céline Robardet, Antoine Scherrer.

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