

Camille Roth

Publications & communications

(last update: Aug 14 2012)

1 Publications

Journals with refereeing

INTERNATIONAL JOURNALS

- I1. "A long-time limit for world subway networks", Camille Roth, Soong Moon Kang, Michael Batty, Marc Barthelemy, *Journal of the Royal Society Interface*, in press.
- I2. "Intrinsically Dynamic Network Communities", Bivas Mitra, Lionel Tabourier, Camille Roth, *Computer Networks*, 56(3), 2012, pp. 1041-1053.
- I3. "Assessing impact and quality from local dynamics of citation networks", Camille Roth, Jiang Wu, Sergi Lozano, *Journal of Informetrics*, 6(1), 2012, pp. 111–120.
- I4. "Generating constrained random graphs using multiple edge switches", Lionel Tabourier, Camille Roth, Jean-Philippe Cointet, *ACM Journal of Experimental Algorithmics*, 16:1.7, 2011.
- I5. "Finding the Semantic-Level Precursors on a Blog Network", Telmo Menezes, Jean-Philippe Cointet, Camille Roth, *Int. J. of Social Computing and Cyber-Physical Systems*, 1(2), 2011, pp. 115–134.
- I6. "Structure of urban movements: polycentric activity and entangled hierarchical flows", Camille Roth, Soong Moon Kang, Michael Batty, Marc Barthélemy, *PLoS One*, 6(1), 2011, e15923.
- I7. "Academic team formation as evolving hypergraphs", Carla Taramasco, Jean-Philippe Cointet, Camille Roth, *Scientometrics*, 85(3), 2010, pp. 721–740.
- I8. "Social and Semantic Coevolution in Knowledge Networks", Camille Roth, Jean-Philippe Cointet, *Social Networks*, 32(1), 2010, pp. 16–29. **Eur. Acad. Soc. "Prize for Best Article 2011"**.
- I9. "On Succinct Representation of Knowledge Community Taxonomies with Formal Concept Analysis", Camille Roth, Sergei Obiedkov, Derrick G. Kourie, *IJFCS (Intl Journal of Foundations of Computer Science)*, 19(2), 2008, pp. 383–404.
- I10. "How Realistic Should Knowledge Diffusion Models Be?", Jean-Philippe Cointet, Camille Roth, *Journal of Artificial Societies and Social Simulation*, 10(3):5, 2007, 20 pp.
- I11. "Empiricism for descriptive social network models", Camille Roth, *Physica A*, 378(1), 2007, pp. 53–58.
- I12. "Lattice-based dynamic and overlapping taxonomies: The case of epistemic communities", Camille Roth, Paul Bourguine, *Scientometrics*, 69(2), 2006, pp. 429–447.

- I13. "Co-evolution in Epistemic Networks – Reconstructing social complex systems", Camille Roth, PhD dissertation published as a special issue of *Structure and Dynamics: eJournal of Anthropological and Related Sciences*, 1(3), article 2, 2006, pp. 3–163.
- I14. "Epistemic communities: Description and Hierarchic Categorization", Camille Roth, Paul Bourguine, *Mathematical Population Studies*, 12(2), 2005, pp. 107–131.

NATIONAL JOURNALS

- N1. "Co-évolution des auteurs et des concepts dans les réseaux épistémiques: le cas de la communauté zebrafish", Camille Roth, *Revue Française de Sociologie*, 48(2), 2008, pp. 333–367.
- N2. "Réseaux épistémiques: formaliser la cognition distribuée", Camille Roth, *Sociologie du Travail*, 50, 2008, pp. 353–371.
- N3. "Viabilité des wikis", Camille Roth, Dario Taraborelli, Nigel Gilbert, *Réseaux*, 152(6), 2008, pp. 205–240.
- N4. "Systèmes complexes sociaux et validation empirique", Camille Roth, *Sociétés*, special issue on complexity, 98(4), 2007, pp. 53–64.
- N5. "La reconstruction en sciences sociales: le cas des réseaux de savoirs", Camille Roth, *Nouvelles Perspectives en Sciences Sociales*, 2(2), 2007, pp. 59–101.

Book chapters / published proceedings of conferences with refereeing (ISBN)

- B1. "{Citation needed}: The dynamics of referencing in Wikipedia", Chih-Chun Chen, Camille Roth, Proceedings of WikiSym'12 8th Intl Symposium on Wikis and Open Collaboration, forthcoming: Aug 27-29, 2012.
- B2. "The role of (non-)conformism in rating platforms", Chih-Chun Chen, Camille Roth, Proceedings of SocialCom'11 IEEE Intl Conf on Social Computing, Boston, USA, Oct 9-11, 2011, in press.
- B3. "Viable Web Communities: Two Case Studies", Dario Taraborelli, Camille Roth, in *Viability and Resilience of Complex Systems*, G. Deffuant, N. Gilbert Eds., Springer, (ISBN 978-3-642-20422-7); 2011, pp. 75–105.
- B4. "Two Paths of Glory: Structural position and trajectories of websites within their topical community", Dominique Cardon, Guilhem Fouetillou, Camille Roth, Proceedings of ICWSM 5th AAAI Intl Conf on Weblogs and Social Media, AAAI Press (ISBN 978-1-57735-505-2), Barcelona, Spain, July, 17-21, 2011, pp.58–65.
- B5. "Communautés, analyse structurale et réseaux socio-sémantiques", Camille Roth, in *Faire communauté en société – Dynamique des appartenances collectives*, I. Sainsaulieu, L. Amiotte-Suchet, M. Salzbrunn Eds., Presses Universitaires de Rennes (ISBN 978-2-7535-1029-6); 2010, pp. 113–128.
- B6. "Motivations and constraints to member engagement in Flickr groups", Chih-Chun Chen, Camille Roth, Proceedings of QTESO Quality in Techno-Social Systems Workshop, IEEE SASO Self-Adaptive and Self-Organizing Systems Intl. Conf., IEEE Press (ISBN 978-1-4244-8684-7), Budapest, Hungary, Sept 28, 2010, pp.126–130.

- B7.** *“Precursors and Laggards: An Analysis of Semantic Temporal Relationships on a Blog Network”*, Telmo Menezes, Camille Roth, Jean-Philippe Cointet, Proceedings of *2nd IEEE SocialCom Intl. Conf. on Social Computing*, IEEE Press (ISBN 978-0-7695-4211-9); Minneapolis, MN, USA, Aug 20-22, 2010, pp.120–127.
- B8.** *“Local Networks, Local Topics: Structural and Semantic Proximity in Blogspace”*, Jean-Philippe Cointet, Camille Roth, Proceedings of *ICWSM 4th AAI Intl Conf on Weblogs and Social Media*, AAAI Press (ISBN 978-1-57735-445-1); Washington, DC, USA, May 2010, pp.223–226 (short paper).
- B9.** *“Approaches to the selection of relevant concepts in the case of noisy data”*, Mikhail Klimushkin, Sergei Obiedkov, Camille Roth, Proceedings of *ICFCA 8th Intl Conf Formal Concept Analysis*, Springer LNCS book series, LNAI 5986 (ISBN 978-3-642-11927-9); Agadir, Morocco, March 2010, pp.255–266 (long paper).
- B10.** *“Socio-semantic Dynamics in a Blog Network”*, Jean-Philippe Cointet, Camille Roth, Proceedings of *IEEE SocialCom Intl Conference on Social Computing*, Vancouver, Canada, Aug 2009, IEEE Press (ISBN 978-1-4244-5334-4), pp.114–121 (long paper) — **“Best Paper Award”**
- B11.** *“Reconstruction Failures: Questioning Level Design”*, Camille Roth, in *Epistemological Aspects of Computer Simulation in the Social Sciences*, F. Squazzoni Ed., Springer LNCS book series, LNAI 5466 (ISBN 978-3-642-01109-2); 2009, pp. 89-98.
- B12.** *“Measuring Wiki Viability”*, Camille Roth, Dario Taraborelli, Nigel Gilbert, Proceedings of *2008 4rd Intl Symposium on Wikis (WikiSym 2008)* (ACM Digital Library) (ISBN 978-1-60558-128-6), Porto, Portugal, Sept 2008, 5 pp. (short paper).
- B13.** *“Viable Wikis — Struggle for life in the wikisphere”*, Camille Roth, Proceedings of *2007 3rd Intl Symposium on Wikis (WikiSym 2007)* (ACM Digital Library) (ISBN 978-1-59593-861-9), Montréal, Canada, Oct 2007, pp. 119–124 (short paper).
- B14.** *“Reducing the Representation Complexity of Lattice-Based Taxonomies”*, Sergei Kuznetsov, Sergei Obiedkov, Camille Roth, Proceedings of *ICCS 15th Intl Conf Conceptual Structures*, Springer LNCS book series, LNAI 4604, (ISBN 978-3-540-73681-3); Sheffield, UK, July , 2007, pp. 241–254 (long paper).
- B15.** *“Towards Concise Representation for Taxonomies of Epistemic Communities”*, Camille Roth, Sergei Obiedkov, Derrick G. Kourie, Proceedings of *4th International Conference on Concept Lattices and their Applications (CLA’06)*, Springer LNCS book series, LNAI 4923 (ISBN 978-3-540-78921-5); Tunis, Oct 2006, pp. 240-255 (long paper).
- B16.** *“Compact, evolving community taxonomies using concept lattices”*, Camille Roth, *Contributions to ICCS 14th Intl Conf Conceptual Structures*, Aalborg University Press (ISBN 87-7307-768-2), Aalborg, Denmark, July , 2006, pp. 172–187 (long paper).
- B17.** *“Generalized Preferential Attachment: Towards Realistic Socio-Semantic Network Models”*, Camille Roth, Proceedings of the *Workshop on Semantic Network Analysis of the 4th ISWC International Semantic Web Conference*, CEUR-WS Series (ISSN 1613-0073), Vol. 171; Galway, Ireland, Nov 2005, pp. 29–42 (long paper).

Proceedings of conferences with refereeing (no ISBN)

- P1. “Cycles in hypergraph-based networks: signal or noise, artefacts or processes?”, Lionel Tabourier, Jean-Philippe Cointet, Camille Roth, Proceedings of *AlgoTel 10e rencontres francophones sur les aspects ALGOarithmiques des TELécommunications*, Saint-Malo, France, May 2008, 4 pp.
- P2. “Morphogenesis of epistemic networks: a case study”, Camille Roth, Proceedings of *ESSA 4th Eur Social Simulation Association Conf*, Toulouse, France, Sept. 2007, pp. 575–588 (long paper).
- P3. “Information diffusion in realistic networks”, Jean-Philippe Cointet, Camille Roth, Proceedings of *AlgoTel 9e rencontres francophones sur les aspects ALGOarithmiques des TELécommunications*, Ile d’Oléron, France, May 2007, 4 pp. — “**Best Student Paper**”
- P4. “Intertemporal topic correlations in online media”, Jean-Philippe Cointet, Emmanuel Faure, Camille Roth, Proceedings of *1st ICWSM International Conference on Weblogs & Social Media*, Boulder, Col., USA, March 2007, 4 pp. (short paper).
- P5. “A basic toolbox for the analysis of dynamic growing networks”, Clémence Magnien, Mahendra Mariadassou, Camille Roth, Proceedings of *AlgoTel 7e rencontres francophones sur aspects ALGOarithmiques des TELécommunications*, Giens, France, May 2005, 4 pp.

2 Other dissemination

EDITED VOLUMES

- Introductory article and co-editing of a symposium entitled “*Collective representations of quality*”, Camille Roth, Dario Taraborelli, Nigel Gilbert. *Mind and Society*, 10(2), 2011, pp. 165–168 (Introductory article) and 165–215 (symposium).
- Proceedings of the workshop “*Social Network Analysis and Conceptual Structures: Exploring Opportunities*” at the 5th ICFCA, Clermont-Ferrand, France, 02/2007. 35 pp.
Editors: Sergei Obiedkov & Camille Roth.

REVIEWS

- Review of “*Les sciences humaines sont-elles des sciences?*” (ed. Thierry Martin), Camille Roth, in *Mathématiques et Sciences Humaines*, 194, 2011, pp. 71-72.
- Review of “*Connections*” (S. Goyal), Camille Roth, in *JASSS*, 13(1), 2010.

POPULARIZATION

- “*Analyse textuelle des motions du Congrès de Reims du PS*”, Camille Roth, Jean-Philippe Cointet, Sergei Obiedkov, Nikita Romashkin.
- “*Place de la Toile*”, David Chavalarias, Camille Roth, broadcasted on France Culture, 21 Jan 2011.

ACADEMIC THESES

- A1. “*Co-evolution in Epistemic Networks – Reconstructing social complex systems*”, PhD dissertation (dir. Paul Bourguin), Ecole Polytechnique, Paris, 2005.
- A2. “*Dynamics and Viability of Adaptive Connectionist Networks*”, thesis for the M.Sc. in Cognitive Science (dir. Paul Bourguin), Ecole des Hautes Etudes en Sciences Sociales, Paris, 2002.

A3. *“Non-linear Planification”*, scientific internship report (dir. Jean-Marc Labat), Laboratoire d’Informatique de Paris VI / Ecole des Ponts et Chaussées, Paris, 1999.

OTHER COMMUNICATIONS

- *“Social dynamics of topical communities”*, invited communication during the *“Dynamique des Graphes”* workshop, LIP6 Complex Networks, Paris, France July 10, 2012.
- *“Dynamics of and on social networks”*, invited tutorial at *“ESSA Summer School”*, Toulouse, France, July 2-6, 2012.
- *“Socio-semantic frameworks for techno-social systems”*, invited speaker at *“International Workshop on Agent-Based Models and Complex Techno-Social Systems”*, ETH-Zürich, July 2-4, 2012.
- *“Dynamics of and on social networks”*, invited tutorial at *“WEHIA 17th annual workshop on Economic Heterogeneous Interacting Agents”*, Paris, June 19-22, 2012.
- *“Socio-semantic frameworks for techno-social systems”*, invited speaker at *“MASHS 2012”* (Modèles et Apprentissage en Sciences Humaines et Sociales), Paris, June 4-5, 2012.
- *“Dynamics of and on subway networks”*, seminar at the Dept. of Computer Science, Université de Louvain-la-Neuve, May 11 2012.
- *“The public space as a socio-semantic system”*, *“Blockseminar”* at the *“Berlin Graduate School of Social Sciences”* (Humboldt Universität), April 27, 2012.
- *“Les deux chemins de la gloire”* (with Dominique Cardon), seminar at the Medialab, Sciences Po, March 27, 2012.
- *“Dynamics of and on subway networks”*, seminar *“Complex Networks”*, LIP6, Paris, March 2, 2012.
- *“Socio-epistemic Hypergraphs”*, invited communication during the *“ASSYST”* workshop, Venice, Italy, Feb 26-28, 2012.
- *“Les sciences naturelles et l’analyse de réseaux”*, invited communication during the *“Dynamique de réseaux sociaux”* workshop, IMERA, Marseille, France, Feb 10, 2012.
- *“Dynamics of and on subway networks”*, séminaire *“Systèmes complexes en sciences sociales”*, Paris, Jan 20, 2012.
- *“Reconstructing streams of media issues from large textual corpora”*, UN GlobalPulse roundtable, NYC, USA, Dec 8, 2011.
- *“Reconstructing streams of media issues”*, roundtable and presentation, Intl Meeting on Visualization in Complex Environments, Politecnico di Torino, November 17-18, 2011.
- *“Socio-semantic Networks: A perspective on social cognition”*, Seminar, MPI-Bildungsforschung (ABC), Berlin, Oct 26, 2011.
- *“Dynamics on and of subway networks”*, ECCS’11 Satellite Workshop DOOCN-V Dynamics of and on Complex Networks, Vienna, Austria, Sept 14-15, 2011.
- *“Social networks and social complex systems”*, Complex Systems Summer School ISCPIF, Paris, France, July, 7, 2011.
- *“Trajectoire de consécration des amateurs dans le monde numérique”* (with Dominique Cardon, Guilhem Fouetillou), Colloque Digital Life Lab (Institut Télécom), *“La participation des amateurs dans l’univers numérique”*, Paris, March 18 2011.
- *“Catégories et treillis: réduction des taxinomies”*, Journée Treillis Camsiens, Paris, December 6, 2010.
- *“Academic teams: evolving hypergraphs”* & *“Introduction to Social and Socio-Semantic Networks”* (with Jean-Philippe Cointet), Univ. Tecnica Federico Santa Maria, Santiago, Chili, Nov 22-25, 2010.
- *“Dynamiques socio-culturelles”*, Journée SOL Entreprise 2.0, Paris, 12 Oct, 2010.

- “*Evolving hypergraphs to appraise academic team formation processes*” (with Carla Taramasco, Jean-Philippe Cointet) & *Modeling the emergence of matrimonial circuits in random kinship networks: alternative approaches and comparative results* (with Klaus Hamberger, Arnaud Bringé) at the *Sunbelt XXX International Social Network Conference*, Riva del Garda, Italy, 07/2010
- “*Co-évolution sociale et sémantique dans les réseaux scientifiques*”, invited communication during the “*Analyse de données relationnelles, session Réseaux Sociaux, EHESS/INED*” workshop, Paris, France, 06/2010.
- “*A primer on Social Network Analysis*”, invited tutorial (with Sergei Obiedkov) at the *ICFCA 10 Intl. Conf. Formal Concept Analysis*, Agadir, Morocco, 03/14-18, 2010.
- “*Reciprocal influence of social and semantic patterns in a dynamic blog network*”, invited communication during the “*COST “Physics of cooperation and conflict”*” workshop, Valencia, Spain, 02/24-26, 2010.
- “*Systemas complejos y sistemas sociales*”, seminar at U. Cundinamarca, Bogota, Colombia, 12/2009.
- “*Reciprocal influence of social and semantic patterns in a dynamic blog network*, invited communication during the “*DOOCN-III Workshop at ECCS Eur Conf Complex Systems 2009*” workshop, Warwick, UK, 23-24/09/2009.
- “*Co-évolution entre réseaux sociaux et opinions: le cas de la blogosphère*, invited speaker at *MASHS 2009*, Toulouse, France, 08-09/06/2009.
- “*Catégories et treillis: réduction des taxinomies*”, Séminaire MDOD (Mathématiques Discrètes, Optimisation et Décision), U. Paris-I, Paris, France, 05/05/2009.
- “*Socio-semantic dynamics of a blog network: An empirical study on French (and US) blogs*”, Seminar at HSE / Dept Applied Maths, Moscow, Russia, 15/04/2009.
- “*Essai d’interprétation de la représentation de la blogosphère française de Webfluence*”, Atelier méthodologique TIC-Migrations, Maison Suger, Paris, France, 27/03/2009.
- “*Dynamiques d’opinion et dynamiques d’interaction: les réseaux sociaux de la blogosphère politique française*”, Séminaire DAPA, LIP6, Paris, France, 02/04/2009.
- “*Réseaux sociaux*”, Atelier de formation aux outils d’analyse textuelle et de visualisation de données, U. Paris-Est (MLV), France, 05/02/2009.
- “*Morphogenesis of Knowledge Networks: Social and Semantic Coevolution*”, Séminaire Interactions, GRE-QAM (CNRS/EHESS), Marseille, France, 12/12/2008.
- “*La morphogénèse des réseaux de savoirs: coévolution sociale et sémantique*”, Séminaire BIPOP-CASYS, Laboratoire Jean Kuntzmann (INRIA/U. Grenoble), Grenoble, France, 04/12/2008.
- “*Évolution des structures relationnelles et des contenus au sein de la blogosphère politique française*”, communication (with Jean-Philippe Cointet) at the *Social Networks Thematic Network Workshop*, French Association of Sociology, Lille, France, 03/2008.
- “*Dynamique des communautés épistémiques et cognition distribuée*, Séminaire “*TICOOP*”, Université de Nice, France, 08/02/2008.
- “*Viable Wikis*”, communication during the “*Towards a Social Science of Web 2.0*” workshop, York, UK, 09/2007.
- “*Patterns and processes in socio-semantic networks*”, communication at the *UK Social Network Conference*, London, 07/2007.
- “*Knowledge networks: from morphogenesis to information diffusion*”, course at the “*Networks as a tool to analyze social systems*” summer school, ENS Lyon, France, 11–15/06/2007.
- “*Diffusion in epistemic networks: patterns and processes*”, communication during the “*DIME Workshop 2.1 “Distributed Networks and the Knowledge-based Economy”*” workshop, Nice, France, 05/2007.

- “How realistic knowledge diffusion models should be?”, communication (with Jean-Philippe Cointet) at the Sunbelt XXVII International Social Network Conference, Corfu, Greece, 05/2007
- “Socially-mediated concept diffusion in a scientific community”, communication (with Jean-Philippe Cointet, Carla Taramasco) at the Sunbelt XXVII International Social Network Conference, Corfu, Greece, 05/2007
- “Reconstruire la structure des communautés épistémiques”, communication at the 2nd AFS congress – Congrès de l’Association Française de Sociologie, groupe ad hoc ‘sociologie et systèmes complexes’, Bordeaux, France, 09/2006.
- Discussant at the “Social Networks and Complexity” workshop organized by Nigel Gilbert & Andras Lorincz at the Collegium Budapest, Hungary, 07/31-08/02, 2006.
- “Modeling the dynamics of epistemic communities”, communication during the “Mathematics and Innovation” workshop organized by Tanya Araújo (ISEG, UT Lisboa), Arrabida, Portugal, 3–6 July, 2006.
- “Modéliser la dynamique des communautés épistémiques”, ICT Usage Lab, Eurecom Institute, Sophia-Antipolis, France, 26/06/2006.
- “Co-evolution, emergence, stigmergence”, European Center for Living Technology, Venice, Italy, 10/04/2006.
- “Social Dynamics of Epistemic Communities”, communication during the “Social and Historical Dynamics” workshop organized by Douglas White & Peter Turchin at the 2nd ECCS, Oxford, UK, 25-29/09, 2006.
- “Tracking epistemic communities”, Austrian Research Centers “Systems Research”, Vienna, Austria, 20 Feb 2006.
- “Réseaux épistémiques”, Département Economie-Gestion-Sciences Humaines, ENST, Paris, 12 Jan 2006.
- “Epistemic Networks”, communication during the “New Perspectives on Complex Systems” workshop organized by Cristopher Moore (SFI & UNM) at the Santa Fe Institute, NM, USA, 26–30/07/2005.
- “Networks of knowledge”, Max Planck Institut—Adaptive Behavior and Cognition, Berlin, Germany, March 11 2005.
- “Dynamique des réseaux bipartis, Reconstruire l’évolution d’une taxonomie et mesurer l’homophilie”, Séminaire Graphes, Réseaux, Interactions, LIAFA, Paris, March 7, 2005.
- “Dynamics of Galois Lattices: The Case of Epistemic Communities”, communication at the Sunbelt XXV International Social Network Conference, Redondo Beach, USA, 2005.
- “Characterizing socio-semantic networks”, Department of Anthropology, UC Irvine, CA, USA, Feb 2005.
- Discussant at the “Cognition and Innovation” workshop organized by David Lane (Univ. Modena), Venice, Italy, 09/27-30, 2004.
- “Social and Cultural Co-evolution”, Department of Social and Cognitive Sciences, University of Modena & Reggio Emilia, Italy, April 2004.
- “Co-évolution des réseaux sociaux et culturels: une approche”, communication at the Journées Graphes, Réseaux et Modélisation (GRM), Paris, France, 12/2003.
- “An Approach on Binding Social and Cultural Networks”, Department of Physics, University of Notre-Dame, IN, USA, Sept. 2003.