

CURRICULUM VITAE

Alain BARRAT

Professional address

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Birth : 21st July 1971 in Paris (France)

Citizenship : French

Languages : English, Italian, German

EDUCATION and PROFESSIONAL EXPERIENCE

Since 2005: Research scientist (joint appointment) at the ISI Foundation, Turin, Italy

Since Oct. 09: Senior Researcher (“Directeur de Recherches”) at the Centre de Physique Théorique, Marseille, France

Sep. 08 - Sep. 09: Researcher (CNRS “Chargé de Recherches”) at the Centre de Physique Théorique, Marseille, France

Oct. 98 - Aug. 08: Researcher (CNRS “Chargé de Recherches”) at the Laboratoire de Physique Théorique, Orsay, France

Sept. 96 - Aug. 98 Postdoctoral position at ICTP

Sept. 93 - Oct. 96 Ph.D. in Physics under the supervision of Marc Mézard Laboratoire de Physique Théorique de l’Ecole Normale Supérieure. Subject : *Out of equilibrium dynamics of glassy systems.*

Oct. 92 - June 93 D.E.A (Advanced Study Diploma) of Theoretical Physics, University Pierre et Marie Curie (Paris VI) and Ecole Normale Supérieure.

Jan. 92 - June 92 Stay at Brown University, Providence, Rhode Island, USA, under the direction of Prof. J.M. Kosterlitz.

Sept. 91 - Dec. 91 Part-time experimental stay at the Institut Curie, Laboratoire de physico-chimie des surfaces et interfaces.

Jan. 91 - Dec. 91 Maîtrise de Physique, University Pierre et Marie Curie (Paris VI) and Ecole Normale Supérieure.

Oct. 90 - June 91 Licence de Physique, University Pierre et Marie Curie (Paris VI) and Ecole Normale Supérieure.

Sept. 90 - Sept. 94 Student at the Ecole Normale Supérieure, Paris, France.

AWARDS

- Paul Langevin Prize of the Société Française de Physique (2009).
- “Jeune Chercheur” award, Festival des Sciences et Technologies 2011 (Marseille, France).
- 2012 Outstanding referee award of the American Physical Society.

EDITORIAL RESPONSIBILITIES

- Academic editor for PLoS ONE.
- Associate editor of Network Science.
- Since April 2006, member of the Advisory Board of Journal of Physics A: Mathematical and General.
- From 2005 to 2010, member of the editorial board of Physical Review E.
- Referee for Journal of Physics A, Journal of Statistical Physics, JSTAT, The European Physical Journal B, Europhysics Letters, Physics Letters A, Physica A, Physical Review E, Physical Review Letters, Nature, PLoS ONE...

CONFERENCE ORGANIZATION, PROGRAM COMMITTEE MEMBERSHIP

- PC member, CCS'17, Cancun, Mexico, September 17-22 2017.
- PC member, DELVE2017 (2nd workshop on Digital Epidemiology and Surveillance, satellite of CCS'17), Cancun, Mexico, September 20 2017.
- PC member, SocInfo2017 (9th International Conference on Social Informatics, Oxford, UK, September 13-15 2017).
- PC member, NetSci2017, Indianapolis, USA, June 19-23 2017.
- PC member, 26th International World Wide Web Conference, 2017 (WWW2017), Perth, Australia, April 3-7, 2017.
- Organization of the conference “Complex Networks: from theory to interdisciplinary applications”, satellite of Statphys26, Marseille, France, July 11-13, 2016.
- PC member, 8th International Conference on Social Informatics (SocInfo), Bellevue, WA, USA, November 14-17, 2016.
- PC member, conference “Digital Epidemiology and Surveillance”, satellite of CCS'16, Amsterdam, The Netherlands, September 20, 2016.
- PC member, conference CCS'16, Amsterdam, The Netherlands, September 19-22, 2016.
- PC member, IC2S2 (International Conference on Computational Social Science), Evanston, USA, June 23-26, 2016.
- PC member, 8th International conference on discrete models of complex systems, Aveiro, Portugal, June 20-22, 2016.
- PC member, conference Contagion'15, satellite of CCS'15, Tempe, Arizona, USA, September 30, 2015.
- PC member, conference IC2S2 (International Conference on Computational Social Science), Helsinki, Finland, June 8-11, 2015.
- PC member, conference NetSci 2015, Zaragoza, Spain, June 1-5, 2015.
- Co-organization of the workshop “Temporal Networks in Human Dynamics”, satellite of ECCS'14, Lucca, Italy, September 22-26, 2014.

- Co-organization of the workshop “Temporal Networks, Human Dynamics and Social Physics”, satellite of NetSci 2014, Berkeley, USA, June 2-6, 2014.
- Co-organization of the thematic school on ”structure and dynamics of complex networks”, Les Houches, France, April 7-18, 2014.
- PC member, ACM Web Science Conference 2014 (WebSci14), Bloomington, June 23-26, 2014.
- PC member, ACM Hypertext conference 2014, Santiago, Chile, Sept 1-4, 2014.
- PC member, workshop “Contagion ’13: Modeling of Disease Contagion Processes”, satellite of ECCS’13, Barcelona, Spain, September 18, 2013.
- Co-organization of the workshop “Temporal Networks in Human Dynamics”, satellite of ECCS’13, Barcelona, Spain, September 19, 2013.
- Co-organization of the workshop “Temporal and Dynamic Networks: From Data to Models”, satellite of NetSci 2013, Copenhagen, Denmark, June 3-4, 2013.
- PC member, WWW2012 conference, Lyon, France, April 16-20, 2012.
- PC member, SIMPLEX 2012, Lyon, France, April 17, 2012.
- PC member, ACM Hypertext 2011, Eindhoven, Netherlands, June 6-9, 2011.
- PC member, Bionetics 2010, Boston, USA, December 1-3, 2010.
- PC member, International Workshop on Complex Networks (CompleNet 2010), Rio de Janeiro, Brazil, October 13-15, 2010.
- Organization of the Workshop “Data driven dynamical networks”, Les Houches, France, September 26 - October 1, 2010.
- PC member, conference SIMPLEX 2010, Genoa, Italy, June 10, 2010.
- PC member, conference “International Workshop on Dynamic Networks”, Avignon, France, June 4, 2010.
- PC member, conference TextGraphs-4: Graph-based Methods for Natural Language Processing, Singapore, August 6-7, 2009.
- PC member, conference SIMPLEX 2009, Venice, Italy, July 1, 2009.
- PC member, ACM Hypertext 2009, Turin, Italy, June 29 - July 1, 2009.
- PC member, International Workshop on Complex Networks (CompleNet 2009), Catania, Italy, May 26-28, 2009.
- Co-organisator of the workshop “Facing the challenge of infectious diseases”, ISI Foundation, Turin, Italy, October 13-17, 2008.
- Co-organisator of the workshop “Theoretical Aspects and Models of Large, Complex and Open Information Networks”, ISI Foundation, Turin, Italy, November 19-21, 2007.
- Co-organisator of the workshop “Complex networks: Dynamics and Topology Interplay”, satellite of “European Conference on Complex Systems ECCS’07”, Dresden, Germany, October 4-5, 2007.

- PC member, workshop “Social Websites - Complex Dynamics and Structure”, satellite of “European Conference on Complex Systems ECCS’07”, Dresden, Germany, October 5, 2007.
- PC member, conference “Complex Networks: from Biology to Information Technology”, Pula, Italy, July 2-6, 2007 (Satellite of STATPHYS 23).
- PC member, “European Conference on Complex Systems ECCS’06”, Oxford, September 25-29, 2006.
- Co-organisator of the thematic institute “Interfacing Networks: from behavioral Networks to info-structures and infrastructures”, Turin, Italy, January 21 - February 9, 2006.
- Co-organisator of the workshop “Dynamical processes on complex networks”, satellite of “European Conference on Complex Systems ECCS’05”, Paris, November 18, 2005.
- Co-organisator of the thematic institute “Granular matter”, Institut Henri Poincaré, Paris, France, January 5 - April 8, 2005.

RESEARCH SUPERVISION

Postdocs

- **September 2013 - August 2016:** supervision of the postdoctoral fellowship of M. Génois, within the ANR-funded project Harms-flu.
- **September 2013 - August 2016:** supervision of the postdoctoral fellowship of C. Vestergaard, within the EU-funded project Multiplex.
- **March 2014 - October 2015:** supervision of the postdoctoral fellowship of R. Mastrandrea, within the interdisciplinary project MITRA founded by the A*MIDEX project (funded by the “Investissements d’Avenir” French Government program).
- **November 2010 - October 2011:** supervision of the postdoctoral fellowship of A. Chatterjee. Topic: dynamical processes on dynamical networks.
- **January 2007 - August 2008:** co-supervision of the postdoctoral fellowship of P. Maynar. Topic: study of the hydrodynamic approach to ballistic annihilation processes.
- **July 2006 - February 2008:** supervision of the postdoctoral fellowship of B. Kozma. Topic: co-evolution of social networks and opinion formation models.
- **December 2003 - November 2005:** co-supervision of the postdoctoral fellowship of A. Puglisi. Topic: granular gases.

PhD students

- **Since October 2017:** co-supervision, with N. Claidière, of V. Gelardi. Topic: *Cognitive underpinnings of social network dynamics*.
- **Since October 2015:** co-supervision, with R. Pastor-Satorras, of A. Moinet. Topic: *Dynamical processes on non-Markovian temporal networks*.
- **October 2013 - September 2016:** supervision of J. Fournet. Topic: *Contacts between individuals: analysis and applications to the study of the spread of infectious diseases*.
- **October 2010 - October 2013:** supervision of A. Machens. Topic: *Epidemic processes on dynamical networks*.

- **September 2009 - December 2012:** supervision of J. Stehlé. Topic: *Empirical study and modeling of dynamical networks.*
- **September 2008 - November 2011:** co-supervision, with V. Colizza, of P. Bajardi. Topic: *Complexity and predictability of epidemic spreading.*
- **October 2005 - July 2008:** co-supervision, with M. Barthélémy, of A. Gautreau. Topic: *Dynamics on complex networks and dynamics of complex networks.*
- **October 2003 - July 2006:** supervision of L. Dall'Asta. Topic: *Dynamical processes on complex networks.*

PUBLICATIONS

Peer-reviewed journals

117. J. Fournet, A. Barrat, *Estimating the epidemic risk using non-uniformly sampled contact data*, Sci. Rep. **7**:9975 (2017).
116. L. Bioglio, M. Génois, C. Vestergaard, C. Poletto, A. Barrat, V. Colizza, *Recalibrating disease parameters for increasing realism in modeling epidemics in closed settings*, BMC Inf Dis **16**:676 (2016).
115. T. Smieszek, S. Castell, A. Barrat, C. Cattuto, P. J. White, G. Krause, *Contact diaries versus wearable proximity sensors in measuring contact patterns at a conference: method comparison and participants' attitudes*, BMC Inf Dis **16**:341 (2016).
114. C. Vestergaard, E. Valdano, M. Génois, C. Poletto, V. Colizza, A. Barrat, *Impact of spatially constrained sampling of temporal contact networks on the evaluation of the epidemic risk*, European Journal of Applied Mathematics **27**, 941 (2016).
113. R. Mastrandrea, A. Barrat, *How to Estimate Epidemic Risk from Incomplete Contact Diaries Data?*, PLoS Comput Biol **12**:e1005002 (2016).
112. M. C. Kiti, M. Tizzoni, T. M. Kinyanjui, D. C. Koech, P. K. Munywoki, M. Meriac, L. Cappa, A. Panisson, A. Barrat, C. Cattuto, D. J. Nokes, *Quantifying social contacts in a household setting of rural Kenya using wearable proximity sensors*, EPJ Data Science **5**:21 (2016).
111. J. Fournet, A. Barrat, *Epidemic risk from friendship network data: an equivalence with a non-uniform sampling of contact networks*, Sci. Rep. **6**:24593 (2016).
110. M. Génois, C. Vestergaard, C. Cattuto, A. Barrat, *Compensating for population sampling in simulations of epidemic spread on temporal contact networks*, Nature Communications **6**:8860 (2015).
109. M. Génois, C. Vestergaard, J. Fournet, A. Panisson, I. Bonmarin, A. Barrat, *Data on face-to-face contacts in an office building suggest a low-cost vaccination strategy based on community linkers*, Network Science **3**, 326 (2015).
108. R. Mastrandrea, A. Soto-Aladro, P. Brouqui, A. Barrat, *Enhancing the evaluation of pathogen transmission risk in a hospital by merging hand-hygiene compliance and contact data: a proof-of-concept study*, BMC Research Notes **8**:426 (2015).
107. R. Mastrandrea, J. Fournet, A. Barrat, *Contact patterns in a high school: a comparison between data collected using wearable sensors, contact diaries and friendship surveys*, PLoS ONE **10**, e0136497 (2015).

106. N. Voirin, C. Payet, A. Barrat, C. Cattuto, N. Khanafer, C. Régis, B. Kim, B. Comte, J.-S. Casalegno, B. Lina, P. Vanhems, *Combining High-Resolution Contact Data with Virological Data to Investigate Influenza Transmission in a Tertiary Care Hospital*, *Infection Control & Hospital Epidemiology* **36**, 254 (2015).
105. M.C. Pachucki, E.J. Ozer, A. Barrat, C. Cattuto, *Mental health and social networks in early adolescence: A dynamic study of objectively-measured social interaction behaviors*, *Social Science & Medicine* **125**, 40 (2015).
104. V. Gemmetto, A. Barrat, C. Cattuto, *Mitigation of infectious disease at school: targeted class closure vs school closure*, *BMC Infectious Diseases* **14**, 695 (2014).
103. C. Vestergaard, M. Génois, A. Barrat, *How memory generates heterogeneous dynamics in temporal networks*, *Phys. Rev. E* **90**, 042805 (2014).
102. J. Fournet, A. Barrat, *Contact patterns among high school students*, *PLoS ONE* **9**:e107878 (2014)
101. A. Barrat, C. Cattuto, A.E. Tozzi, P. Vanhems, N. Voirin, *Measuring contact patterns with wearable sensors: methods, data characteristics and applications to data-driven simulations of infectious diseases*, *Clin. Microbiol. Infect.* **20**:10-16 (2014).
100. N. Tremblay, A. Barrat, C. Forest, M. Nornberg, J.-F. Pinton, P. Borgnat, *Bootstrapping under constraint for the assessment of group behavior in human contact networks*, *Phys. Rev. E* **88**, 052812 (2013).
99. L. Gauvin, A. Panisson, C. Cattuto, A. Barrat, *Activity clocks: spreading dynamics on temporal networks of human contact*, *Sci. Rep.* **3**: 3099 (2013).
98. P. Vanhems, A. Barrat, C. Cattuto, J.-F. Pinton, N. Khanafer, C. Régis, B. Kim, B. Comte, N. Voirin, *Estimating potential infection transmission routes in hospital wards using wearable proximity sensors*, *PLoS ONE* **8**(9):73970 (2013).
97. A. Barrat, C. Cattuto, V. Colizza, F. Gesualdo,, L. Isella, E. Pandolfi, J.-F. Pinton, L. Ravà, C. Rizzo, M. Romano, J. Stehlé, A.E. Tozzi W. Van den Broeck, *Empirical temporal networks of face-to-face human interactions*, *EPJ Special Topics* **222**(6): 1295 (2013).
96. J. Stehlé, F. Charbonnier, T. Picard, C. Cattuto, A. Barrat, *Gender homophily from spatial behavior in a primary school: a sociometric study*, *Social Networks* **35**, 604 (2013).
95. M. Starnini, A. Machens, C. Cattuto, A. Barrat, R. Pastor-Satorras, *Immunization strategies for epidemic processes in time-varying contact networks*, *J. Theor. Biol.* **337**, 89 (2013).
94. A. Machens, F. Gesualdo, C. Rizzo, A.E. Tozzi, A. Barrat, C. Cattuto, *An infectious disease model on empirical networks of human contact: bridging the gap between dynamic network data and contact matrices*, *BMC Infectious Diseases* **13**, 185 (2013).
93. A. Barrat, B. Fernandez, K. Lin, L.-S. Young, *Modeling temporal networks using random itineraries*, *Phys. Rev. Lett.* **110**, 158702 (2013).
92. L. Aiello, A. Barrat, C. Cattuto, R. Schifanella, G. Ruffo, *Link creation and information spreading over social and communication ties in an interest-based online social network*, *EPJ Data Science* **1**:12 (2012) .
91. P. Bajardi, A. Barrat, L. Savini, V. Colizza, *Optimizing surveillance for livestock disease spreading through animal movements*, *J. R. Soc. Interface* **9**:2814 (2012) .

90. A. Panisson, A. Barrat, C. Cattuto, G. Ruffo, R. Schifanella, *On the Dynamics of Human Proximity for Data Diffusion in Ad-Hoc Networks*, Ad Hoc Networks **10**: 1532 (2012) .
89. L. Aiello, A. Barrat, R. Schifanella, C. Cattuto, B. Markines, F. Menczer, *Friendship prediction and homophily in social media*, ACM Trans. Web **6**, 9:1 - 9:33 (2012).
88. P. Gravino, V. Servedio, A. Barrat, V. Loreto, *Complex structures and semantics in free word association*, ACS **15**:1250054 (2012) .
87. M. Starnini, A. Baronchelli, A. Barrat, R. Pastor-Satorras, *Random walks on temporal networks*, Phys. Rev. E **85**:056115 (2012).
86. J. Stehlé, N. Voirin, A. Barrat, C. Cattuto, L. Isella, J.-F. Pinton, M. Quaggiotto, W. Van den Broeck, C. Régis, B. Lina, P. Vanhems, *High-resolution measurements of face-to-face contact patterns in a primary school* PLoS ONE **6**:e23176 (2011).
85. X. Leoncini, A. Barrat, C. Josserand, S. Villain-Guillot, *Offsprings of a Point Vortex*, Eur. Phys. J. B **82**, 173 (2011).
84. J. Stehlé, N. Voirin, A. Barrat, C. Cattuto, V. Colizza, L. Isella, C. Régis, J.-F. Pinton, N. Khanafer, W. Van den Broeck, P. Vanhems, *Simulation of a SEIR infectious disease model on the dynamic contact network of conference attendees* BMC Medicine **9**: 87 (2011).
83. P. Bajardi, A. Barrat, F. Natale, L. Savini, V. Colizza, *Dynamical patterns of cattle trade movements*, PLoS ONE **6**:e19869 (2011).
82. K. Zhao, J. Stehlé, G. Bianconi, A. Barrat, *Social network dynamics of face-to-face interactions* Phys. Rev. E **83**:056109 (2011).
81. P. Moretti, A. Baronchelli, A. Barrat, R. Pastor-Satorras, *Complex networks and glassy dynamics: walks in the energy landscape*, J. Stat. Mech. P03032 (2011).
80. L. Isella, M. Romano, A. Barrat, C. Cattuto, V. Colizza, W. Van den Broeck, F. Gesualdo, E. Pandolfi, L. Ravà, C. Rizzo, A.E. Tozzi, *Close encounters in a pediatric ward: measuring face-to-face proximity and mixing patterns with wearable sensors*, PLoS ONE **6**:e17144 (2011).
79. L. Isella, J. Stehlé, A. Barrat, C. Cattuto, J.-F. Pinton, W. Van den Broeck, *What's in a crowd? Analysis of face-to-face behavioral networks*, J. Theor. Biol. **271**, 166 (2011).
78. C. Cattuto, W. Van den Broeck, A. Barrat, V. Colizza, J.-F. Pinton, A. Vespignani, *Dynamics of person-to-person interactions from distributed RFID sensor networks*, PLoS ONE **5**:e11596 (2010).
77. J. Stehlé, A. Barrat, G. Bianconi, *Dynamical and bursty interactions in social networks*, Phys. Rev. E **81**:035101(R) (2010).
76. A. Baronchelli, A. Barrat, R. Pastor-Satorras, *Glass transition and random walks on complex energy landscapes*, Phys. Rev. E **80**:020102(R) (2009).
75. C. Cattuto, A. Barrat, A. Baldassarri, G. Schehr, V. Loreto, *Collective dynamics of social annotations*, Proc. Natl. Acad. Sci. USA. **106**:10511 (2009).
74. A. Gautreau, A. Barrat, M. Barthélémy, *Microdynamics in stationary complex networks*, Proc. Natl. Acad. Sci. USA **106**:8847 (2009).
73. F. Radicchi, A. Barrat, S. Fortunato, J. J. Ramasco, *Renormalization flows in complex networks*, Phys. Rev. E **79**:026104 (2009).

72. F. Radicchi, J. J. Ramasco, S. Fortunato, A. Barrat, *Complex networks renormalisation: flows and fixed points*, Phys. Rev. Lett. **101**:148701 (2008).
71. P. Maynar, M. I. García de Soria, G. Schehr, A. Barrat, E. Trizac, *Dynamics of Annihilation II: fluctuations of global quantities*, Phys. Rev. E **77**:051128 (2008).
70. M. I. García de Soria, P. Maynar, G. Schehr, A. Barrat, E. Trizac, *Dynamics of Annihilation I : Linearized Boltzmann Equation and Hydrodynamics*, Phys. Rev. E **77**:051127 (2008).
69. B. Kozma, A. Barrat, *Consensus formation on coevolving networks: groups' formation and structure*, J. Phys. A: Math. Theor. **41**:224020 (2008).
68. C. Nardini, B. Kozma, A. Barrat, *Who's talking first? Consensus or lack thereof in coevolving opinion formation models*, Phys. Rev. Lett. **100**:158701 (2008).
67. I. Alvarez-Hamelin, L. Dall'Asta, A. Barrat, A. Vespignani, *K-core decomposition of Internet graphs: hierarchies, self-similarity and measurement biases*, Networks and Heterogeneous Media **3**:371 (2008).
66. A. Gautreau, A. Barrat, M. Barthélemy, *Global disease spread: statistics and estimation of arrival times*, J. Theor. Biol. **251**:509 (2008).
65. B. Kozma, A. Barrat, *Consensus formation on adaptive networks*, Phys. Rev. E **77**:016102 (2008).
64. V. Colizza, A. Barrat, M. Barthélemy, A. Vespignani, *Predictability and epidemic pathways in global outbreaks of infectious diseases: the SARS case study*, BMC Medicine **5**:34 (2007).
63. A. Baronchelli, L. Dall'Asta, A. Barrat, V. Loreto, *Non-equilibrium phase transition in negotiation dynamics* Phys. Rev. E **76**:051102 (2007).
62. E. Trizac, A. Barrat, M. H. Ernst, *Boltzmann equation for dissipative gases in homogeneous states with nonlinear friction*, Phys. Rev. E **76**:031305 (2007).
61. A. Gautreau, A. Barrat, M. Barthélemy, *Arrival Time Statistics in Global Disease Spread*, J. Stat. Mech.:L09001 (2007).
60. V. Colizza, A. Barrat, M. Barthélemy, A. Vespignani, *Epidemic predictability in meta-population models with heterogeneous couplings: the impact of disease parameter values*, International Journal of Bifurcation and Chaos **17**:2491 (2007).
59. F. Viger, A. Barrat, L. Dall'Asta, C.-H. Zhang, E. Kolaczyk, *What is the real size of a sampled network? The case of the Internet*, Phys. Rev. E **75**:056111 (2007).
58. V. Colizza, M. Barthélemy, A. Barrat, A. Vespignani, *Epidemic modeling in complex realities*, Comptes Rendus Biologies **330**:364 (2007).
57. A. Barrat, E. Trizac, M. H. Ernst, *Quasi-elastic solutions to the nonlinear Boltzmann equation for dissipative gases*, J. Phys. A: Math. Theor. **40**:4057-4073 (2007).
56. V. Colizza, A. Barrat, M. Barthélemy, A.-J. Valleron, A. Vespignani, *Modeling the world-wide spread of pandemic influenza: baseline case and containment interventions*, PLoS Medicine **4**(1): e13 (2007).
55. P. Visco, A. Puglisi, A. Barrat, E. Trizac, F. van Wijland, *Fluctuations of power injection in randomly driven granular gases*, J. Stat. Phys. **125**:533 (2006).
54. V. Colizza, A. Barrat, M. Barthélemy, A. Vespignani, *The modeling of global epidemics: stochastic dynamics and predictability*, Bull. Math. Bio. **68**:1893 (2006).

53. M. H. Ernst, E. Trizac and A. Barrat, *The Boltzmann equation for driven systems of inelastic soft spheres*, J. Stat. Phys. **124**:549 (2006).
52. M. H. Ernst, E. Trizac and A. Barrat, *The rich behavior of the Boltzmann equation for dissipative gases*, Europhys. Lett. **76**:56 (2006).
51. L. Dall'Asta, A. Baronchelli, A. Barrat, V. Loreto, *Non-equilibrium dynamics of language games on complex networks*, Phys. Rev. E **74**:036105 (2006).
50. P. Visco, A. Puglisi, A. Barrat, F. van Wijland, E. Trizac *Energy fluctuations in vibrated and driven granular gases*, Eur. Phys. J. B **51**:377 (2006).
49. L. Dall'Asta, A. Barrat, M. Barthélemy, A. Vespignani, *Vulnerability of weighted networks*, J. Stat. Mech. P04006 (2006).
48. L. Dall'Asta, I. Alvarez-Hamelin, A. Barrat, A. Vázquez, A. Vespignani, *Exploring networks with traceroute-like probes: theory and simulations*, Theoretical Computer Science **355** (2006) 6.
47. L. Dall'Asta, A. Baronchelli, A. Barrat, V. Loreto, *Agreement dynamics on small-world networks*, Europhys. Lett. **73**:969 (2006).
46. V. Colizza, A. Barrat, M. Barthélemy, A. Vespignani, *The role of the airline transportation network in the prediction and predictability of global epidemics*, Proc. Natl. Acad. Sci. USA. **103**:2015 (2006).
45. A. Baronchelli, L. Dall'Asta, A. Barrat, V. Loreto, *Topology Induced Coarsening in Language Games*, Phys. Rev. E **73**: 015102(R) (2006).
44. A. Puglisi, P. Visco, A. Barrat, E. Trizac, F. van Wijland, *Fluctuations of internal energy flow in a vibrated granular gas* Phys. Rev. Lett. **95**, 110202 (2005).
43. P. Visco, A. Puglisi, A. Barrat, E. Trizac, F. van Wijland, *Injected power and entropy flow in a heated granular gas*, Europhys. Lett. **72**, 55 (2005).
42. C. Castellano, V. Loreto, A. Barrat, F. Cecconi, D. Parisi, *Comparison of voter and Glauber ordering dynamics on networks*, Phys. Rev. E **71**, 066107 (2005).
41. A. Baldassarri, A. Barrat, G. D'Anna, V. Loreto, P. Mayor, A. Puglisi, *What is the temperature of a granular medium?*, J. Phys.: Condens. Matter **17**, S2405 (2005).
40. A. Barrat, E. Trizac, M. Ernst, *Granular gases: dynamics and collective effects*, J. Phys.: Condens. Matter **17**, S2429 (2005).
39. A. Barrat, M. Barthélemy, A. Vespignani, *The effects of spatial constraints in the evolution of weighted complex networks*, J. Stat. Mech. P05003 (2005).
38. M. Barthélemy, A. Barrat, R. Pastor-Satorras, A. Vespignani, *Dynamical patterns of epidemic outbreaks in complex heterogeneous networks*, J. Theor. Biol. **235**, 275 (2005).
37. L. Dall'Asta, I. Alvarez-Hamelin, A. Barrat, A. Vázquez, A. Vespignani, *Statistical theory of Internet exploration*, Phys. Rev. E **71**, 036135 (2005).
36. A. Barrat, R. Pastor-Satorras, *Rate equation approach for correlations in growing network models*, Phys. Rev. E **71**, 036127 (2005).
35. P. Mayor, G. D'Anna, A. Barrat, V. Loreto, *Observing Brownian motion and measuring temperatures in vibration-fluidized granular matter*, New Journal of Physics **7**, 28 (2005).

34. A. Barrat, M. Barthélémy, A. Vespignani, *Modeling the evolution of weighted networks*, Phys. Rev. E **70**, 066149 (2004).
33. A. Barrat, M. Barthélémy, A. Vespignani, *Traffic-driven model of the World Wide Web graph*, Lecture Notes in Computer Science **3243**, 56 (2004).
32. D. Paolotti, A. Barrat, U. Marini Bettolo Marconi, A. Puglisi, *Thermal convection in mono-disperse and bi-disperse granular gases: A simulation study*, Phys. Rev. E **69**, 061304 (2004).
31. A. Barrat, M. Barthélémy, A. Vespignani, *Weighted evolving networks: coupling topology and weights dynamics*, Phys. Rev. Lett. **92**, 228701 (2004).
30. M. Barthélémy, A. Barrat, R. Pastor-Satorras, A. Vespignani, *Velocity and hierarchical spread of epidemic outbreaks in complex networks*, Phys. Rev. Lett. **92**, 178701 (2004).
29. A. Barrat, M. Barthélémy, R. Pastor-Satorras, A. Vespignani, *The architecture of complex weighted networks*, Proc. Natl. Acad. Sci. USA. **101**, 3747 (2004).
28. A. Barrat, V. Loreto and A. Puglisi, *Temperature probes in binary granular gases*, Physica A **334**, 513 (2004).
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- Julia Eberle, Karsten Stegmann, Frank Fischer, Alain Barrat, Kristine Lund, *Finding Collaboration Partners in a Scientific Community: The Role of Cognitive Group Awareness, Career Level, and Disciplinary Background*, Proceedings of the 12th International Conference on Computer Supported Collaborative Learning (CSCL), Philadelphia, USA, June 18-22, 2017, p. 519-526 (2017).
- Mark Kibarov, Martin Atzmueller, Jens Illig, Christoph Scholz, Alain Barrat, Ciro Cattuto, Gerd Stumme, *Is Web Content a Good Proxy for Real-Life Interaction? A Case Study Considering Online and Offline Interactions of Computer Scientists*, Proceedings of the 2015 ACM/IEEE International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2015, Paris, France, August 25-28 2015.

- Christoph Scholz, Martin Atzmueller, Gerd Stumme, Alain Barrat, Ciro Cattuto, *New Insights and Methods for Predicting Face-To-Face Contacts*, Proceedings of the 7th International Conference on Weblogs and Social Media (ICWSM-13), July 2013, Boston, USA.
- A. Panisson, L. Gauvin, A. Barrat, C. Cattuto, *Fingerprinting temporal networks of close-range human proximity*, Proceedings of the International Workshop on the Impact of Human Mobility in Pervasive Systems and Applications 2013, San Diego, March 18, 2013.
- A. Barrat, C. Cattuto, M. Szomszor, W. Van den Broeck, H. Alani, *Social dynamics in conferences: analysis of data from the Live Social Semantics application*, Proceedings of the 9th International Semantic Web conference ISWC2010, Shanghai, China, November 7-11, 2010.
- L. Aiello, A. Barrat, C. Cattuto, G. Ruffo, R. Schifanella, *Link creation and profile alignment in the aNobii social network* Proceedings of the Second IEEE International Conference on Social Computing SocialCom 2010, Minneapolis, USA, August 20-22, 2010.
- M. Szomszor, C. Cattuto, W. Van den Broeck, A. Barrat, H. Alani , *Semantics, Sensors, and the Social Web: The Live Social Semantics experiments*, Proceedings of the 7th Extended Semantic Web Conference ESWC10, Lecture Notes in Computer Science 6089 (2010) p 196-210.
- W. Van den Broeck, C. Cattuto, A. Barrat, M. Szomszor, G. Correndo, H. Alani, *The Live Social Semantics application: a platform for integrating face-to-face presence with on-line social networking*, Proceedings of the 1st International Workshop on Communication, Collaboration and Social Networking in Pervasive Computing Environments PerCOL2010.
- R. Schifanella, A. Barrat, C. Cattuto, B. Markines, F. Menczer, *Folks in folksonomies: Social link prediction from shared metadata*, Proceedings of the third ACM International Conference on Web Search and Data Mining WSDM 2010.
- H. Alani, M. Szomszor, C. Cattuto, W. Van den Broeck, G. Correndo, A. Barrat, *Live social semantics*, Proceedings of the 8th International Semantic Web Conference ISWC2009.
- A. Barrat, A. Baronchelli, L. Dall'Asta, V. Loreto *Agreement dynamics on interaction networks with diverse topologies*, Chaos **17**, 026111 (2007). Workshop on Optimization in Complex Networks, June 19-22, 2006, Los Alamos, New Mexico, USA.
- A. Baronchelli, L. Dall'Asta, A. Barrat, V. Loreto, *Strategies for fast convergence in semiotic dynamics*, Proceedings of the Tenth International conference on the simulation and synthesis of living systems (Alife X), MIT Press, Bloomington, Indiana, USA, June 3-7, 2006.
- A. Baronchelli, L. Dall'Asta, A. Barrat, V. Loreto, *Bootstrapping communication in language games. strategy, topology and all that*, Proceedings of the Sixth International Conference on the Evolution of Language (Evolang6), Rome, April 12-15, 2006.
- I. Alvarez-Hamelin, L. Dall'Asta, A. Barrat, A. Vespignani, *Large scale networks fingerprinting and visualization using the k-core decomposition*, p. 41, in Advances in Neural Information Processing Systems 18, Y. Weiss and B. Schölkopf and J. Platt Eds, MIT Press, Cambridge, 2006.

Book

- A. Barrat, M. Barthélémy, A. Vespignani, *Dynamical processes on complex networks*, Cambridge University Press (2008).

Book chapters

- A. Barrat, C. Cattuto, *Face-to-face interactions*. In *Social Phenomena: From Data Analysis to Models*, Springer (2015), B. Gonçalves and N. Perra Eds.
- A. Barrat, C. Cattuto, *Temporal networks of face-to-face human interactions*. In *Temporal networks*, Springer (2013), P. Holme et J. Saramäki Eds.
- A. Barrat, M. Barthélémy, A. Vespignani, *The architecture of complex weighted networks: Measurements and models*. In *Large scale structure and dynamics of complex networks: From Information Technology to Finance and Natural Science*, World Scientific (2007), G. Caldarelli and A. Vespignani Eds.
- A. Barrat, L. Dall'Asta, I. Alvarez-Hamelin and A. Vespignani, *The large scale structure of the Internet*. In *Large scale structure and dynamics of complex networks: From Information Technology to Finance and Natural Science*, World Scientific (2007), G. Caldarelli and A. Vespignani Eds.

CONFERENCES (since 2001)

- **Invited Talk** “Epidemic Risk Evaluation from (Incomplete) Proxies of Contact Network Data”, Cambridge Networks Day 2017, Cambridge, UK, June 13, 2017.
- **Invited Talk** “Epidemic Risk Evaluation from (Incomplete) Proxies of Contact Network Data”, Crossroads in complex systems, IFISC, Mallorca, Spain, June 5-8, 2017.
- **Invited Talk** “Networks of human contacts: from data to applications”, Journées de la Physique Niçoise, Nice, France, May 23, 2017.
- **Invited Talk** “From static to temporal networks”, Workshop “The symphony of modern neuroscience”, IMéRA, Marseille, France, March 15, 2017.
- **Invited Talk** “Epidemic risk evaluation from incomplete contact network data”, Contagion’16, Satellite of CCS2016, Amsterdam, The Netherlands, September 21, 2016.
- Talk “How to estimate epidemic risk from incomplete contact diaries data”, CCS2016, Amsterdam, The Netherlands, September 19-22, 2016.
- **Invited Talk** “Epidemic risk evaluation from incomplete contact network data”, 8th International conference on discrete models of complex systems, Aveiro, Portugal, June 20-22, 2016.
- **Invited Talk** “Mobility and contact networks in the dissemination of epidemics”, Workshop “Motivations for Motion: Lessons and Open Questions from Macro to Micro scale”, IMéRA, Marseille, France, May 30, 2016.
- **Invited Talk** “Mining networks of human contacts: from data to applications”, CompleNet 2016, Dijon, France, March 23-25, 2016.
- Talk “Compensating for population sampling in simulations of epidemic spread on temporal contact networks”, Conference on Complex Systems CCS’15, Tempe, USA, September 28 - October 2, 2015.
- **Invited Talk** “Compensating for population sampling in simulations of epidemic spread on temporal contact networks”, Workshop “Dynamics on and of Complex Networks”, satellite of NetSci2015, Zaragoza, Spain, June 2, 2015.

- **Invited Talk** “Day-to-day human interaction networks: from data to social sciences and epidemiology”, Workshop “Collective dynamics in physics, biology and social sciences”, CECAM-IRL, University College Dublin, Ireland, May 20-22, 2015.
- **Invited Talk** “Day-to-day human interaction networks: from data to social sciences and epidemiology”, Computational Social Science workshop, satellite of ECCS’14, Lucca, Italy, September 24-25, 2014.
- Talk “Contact patterns among high school students”, ECCS’14, Lucca, Italy, September 22-26, 2014.
- **Invited Talk** “Day-to-day human interaction networks: from data to social sciences and epidemiology”, International Workshop on contagion dynamics in socio-economic systems, Paris, France, September 12, 2014.
- **Invited Talk** “Day-to-day human interaction networks”, workshop “Interaction networks and collective motion in swarms, flocks and crowds”, Aalto university, Helsinki, Finland, May 26-28, 2014.
- **Invited Talk** “Modeling temporal networks using random itineraries”, Nice Workshop on random graphs, Nice, France, May 14-15, 2014.
- **Invited Talk** “Online and offline interaction networks”, workshop “Complexity in Online Social Networks and Big Data”, Satellite of ECCS’13, Barcelona, Spain, September 19, 2013.
- Talk “Modeling temporal networks using random itineraries”, NetSci 2013, Copenhagen, Denmark, June 3-7, 2013.
- Talk “Mining networks of human contact with wearable sensors”, workshop SBIP ”System’s Biology Approach to Infectious Processes”, Lyon, France, May 13-15, 2013.
- **Invited Talk** “Epidemic spreading on time-varying networks of human contacts”, Workshop “Statistical Network Science with Applications”, Lorentz Center, Leiden, Netherlands, April 2-5, 2013.
- **Invited Talk** Exposé “La physique et la dynamique des réseaux”, colloque “Penser les transformations”, ENS Lyon, December 11, 2012.
- **Invited Talk** “Réseaux dynamiques : de l’analyse à la modélisation”, 3ième conférence sur les modèles et l’analyse des réseaux: Approches mathématiques et informatiques, LIPN - Institut Galilée , Université Paris Nord, Villetaneuse, October 17-18, 2012.
- **Invited Talk** “Dynamical networks: from measures to models”, Simplex 2012 (4th annual workshop on simplifying networks for practitioners), Lyon, France, April 17, 2012.
- **Invited Talk** “Mining networks of human contact with wearable sensors”, Focus Session: Complex and Co-evolving Networks - Empirical Studies of Social Networks, APS March Meeting 2012, Boston, USA, February 27 - March 2, 2012.
- **Invited Talk** “New technologies for epidemic risk investigation”, IMMI workshop “Bacterial evasion to antiinfectives: from gene to public health”, Abbaye des Vaux de Cernay, France, January 15-17, 2012.
- **Invited Talk** “Online and offline social networks”, Workshop “Social networks, from structures to politics”, Lyon, December 12-13, 2011.
- **Invited Talk** “La notion de réseau complexe”, workshop “Médias011, Y a-t-il une richesse des réseaux ?”, Aix-en-Provence, December 8-9, 2011.

- **Invited Talk** “Mining networks of human contact with wearable sensors”, workshop on “Complex Dynamics of Human Interaction”, satellite de European Conference on Complex Systems, Vienna, Austria, September 14, 2011.
- **Invited Talk** “Link creation and profile alignment in the aNobii social network”, workshop on “Dynamics on and of complex networks”, satellite of the European Conference on Complex Systems, Vienna, Austria, September 14-15, 2011.
- **Invited Talk** “Dynamique des réseaux sociaux: de la mesure à la modélisation”, mini-colloque “Matière Molle, Systèmes complexes et hors équilibre”, congrès de la Société Française de Physique, Bordeaux, july 4-8, 2011.
- Talk “Link creation and profile alignment in the aNobii social network”, workshop “Modèles et apprentissages en Sciences Humaines et Sociales”, Marseilles, Centre de la Vieille Charité june 23-24 2011.
- Talk “What’s in a crowd? Analysis of face-to-face behavioral networks” NetSci 2011, Budapest, june 8-10, 2011.
- **Invited Talk** “Link creation and profile alignment in the aNobii social network”, workshop “Spreading, Influencing, and Cascading in Social and Information Networks”, satellite of NetSci 2011, Budapest, june 7, 2011.
- **Invited Talk** “On and off-line social networks”, Turunç Workshop on Complex Systems 2010, Turunç, Turkey, August 30 -September 1 2010.
- Participation to the panel “What Is Network Science? Where Has It Been and Where Is It Going?”, 2010 Information Theory and Applications Workshop, University of California, San Diego, USA, January 31 - February 5 2010.
- **Invited Talk** “Linking on-line social networks and real-world human proximity”, 2010 Information Theory and Applications Workshop, University of California, San Diego, USA, January 31 - February 5 2010.
- **Invited Talk** “The interplay of social links and user similarity in social media”, Quality commons workshop, Paris, France, January 28 - 29 2010.
- **Invited Talk** “Etude des dynamiques d’interactions sociales par des reseaux de capteurs RFID”, Colloque “Theoretical Physics of Biological Systems”, Paris, France, December 17 - 18 2009.
- **Invited Talk** “Etude des dynamiques d’interactions sociales par des reseaux de capteurs RFID”, troisième Colloque National des systèmes complexes : “Vers une science et ingénierie des systèmes complexes”, Paris, France, November 25 - 27 novembre 2009.
- **Invited Talk** “The Sociopatterns project”, Lakeside Research Days, Klagenfurt, Austria, July 13-17 2009.
- Talk “The Sociopatterns project”, NetSci 2009 (International workshop on network science), Venice, Italy, June 29 - July 3 2009.
- **Invited Talk** “High Resolution Dynamical Mapping of Social Interactions with Active RFID”, DIME international conference on the formation and the evolution of social and economic networks, Paris, France, June 25-27 2009.
- **Invited Talk** “Opinion formation: a statistical physicist’s viewpoint”, Colloquium “Alignment in Communication”, Bielefeld, Germany, December 1 2008.

- Talk “Who’s talking first? Consensus or lack thereof in coevolving opinion formation models”, International workshop “Sociophysics: status and perspectives”, ISI Foundation, Turin, Italy, May 26-29 2008.
- Talk “Coexisting linguistic conventions in generalized language games”, Evolang 2008 (7th evolution of language conference), Barcelone, Spain, March 11-15th 2008.
- **Invited Talk** “Agreement dynamics on interaction networks: the Naming Game paradigm”, International School on Complexity: opinions, semiotic dynamics, and Language, Erice, Italy, July 14-19 2007.
- **Invited Talk** “Adaptive networks: the example of consensus formation”, International Conference on the Formation of Social Networks, Carré des Sciences, Paris, France, June 28-29th 2007.
- Lecture “Internet: a complex network”, Spring course “The power of networks”, Ecole Polytechnique, France, March 28 2007.
- **Invited Talk** “Epidémiologie et Réseaux complexes”, Journée scientifique du calcul appliqué de Paris-Sud, Orsay, France, March 27 2007.
- Talk “Epidémiologie et réseaux complexes”, Laboratoire de Physique Théorique, Toulouse, France, March 20 2007.
- **Invited Talk** “Epidémiologie et Réseaux complexes”, Journées de Physique Statistique 2007, Paris, France, January 25-26 2007.
- **Invited Talk** “Epidemiology and complex networks”, Critical Events in Evolving Networks open workshop, Bruxelles, Belgium, January 17 2007.
- **Invited Talk** “Naming Game: dynamics on complex networks”, Workshop on Social and Ecological Networks (Satellite of ECCS 06), Oxford, UK, September 28-29 2006.
- Talk “Naming Game: dynamics on complex networks”, Workshop on New Directions on Complex Systems, Istanbul, Turkey, September 4-8 2006.
- **Invited Talk** “Naming Game: dynamics on complex networks”, workshop on Optimization in Complex Networks, Los Alamos, New Mexico, USA, June 19-22 2006.
- Poster “Strategies for fast convergence in semiotic dynamics”, Tenth International conference on the simulation and synthesis of living systems (Alife X), Bloomington, Indiana, USA, June 3-7, 2006.
- Talk “Traceroute-like exploration of unknown networks: a statistical analysis”, International Conference on Network Science (NetSci 2006), Bloomington, Indiana, USA, May 22-25 2006.
- **Invited Talk** “Naming Game: dynamics on complex networks”, workshop “Agent Based models: from analytical models to real life phenomenology”, ISI foundation, Turin, Italy, April 5-10 2006.
- **Invited Talk** “Introduction to complex networks”, International School on Semiotic Dynamics, Language and Complexity, Ettore Majorana Foundation and Center For Scientific Culture Erice, Italy, December 12-15 2005.
- Talk “Traceroute-like exploration of unknown networks: a statistical analysis”, European Conference on Complex Systems Paris, November 14-18 2005.
- **Invited Talk** “Traceroute-like exploration of unknown networks: a statistical analysis”, workshop on structure and function of complex networks, Trieste, Italie, May 16-28 2005.

- Lecture “Réseaux complexes valués”, thematic school “Grands réseaux d’interactions”, Paris, April 25-29 2005.
- **Invited Talk** “Traffic-driven model of the World Wide Web Graph”, Third Workshop on Algorithms and Models for the Web-Graph (WAW 2004), Rome, Italy, October 16 2004.
- **Invited Talk** “Traceroute-like exploration of unknown networks: a statistical analysis”, conference “Combinatorial and Algorithmic Aspects of Networking and the Internet”, Banff, Canada, august 5-7 2004.
- **Invited Talk** “Graphes petit-monde”, Algotel 2004 (6èmes Rencontres Francophones sur les aspects Algorithmiques des Télécommunications), May 26-28 2004, Batz-sur-mer, France.
- **Invited Talk** “Graphes petit-monde”, Algotel 2004 (6èmes Rencontres Francophones sur les aspects Algorithmiques des Télécommunications), Mai 26-28 2004, Batz-sur-mer, France.
- **Invited Talk** “Study of some weighted networks”, Second International conference on frontier science, Pavie, Italie, september 8-12 2003.
- **Invited Talk** “Study of some weighted networks”, Conference on Growing Networks and Graphs in Statistical Physics, Finance, Biology and Social Systems, Rome, september 1-5 2003.
- Talk “Dynamique des gaz granulaires”: séminaire commun LPT-LPTMS (Orsay), January 9 2003; séminaire à l’IAP (Paris), April 17 2003, mini-conférence “Physique statistique toulousaine”, IRSAMC (Toulouse), July 4 2003.
- Talk “Random inelasticity and velocity fluctuations in a driven granular gas”, CECAM workshop “Granular Gases Theory - Experiment - Simulation”, Lyon, September 2-5 2002.
- Talk “Quelques aspects de la physique statistique des milieux granulaires”, Ecole Polytechnique Fédérale de Lausanne, séminaire de la section de physique, April 15 2002.
- Talk “Fluctuation-Dissipation ratio for compacting granular media”, conference “Unifying Concepts in Glass Physics”, Rome, February 27 - March 2 2002.
- Talk “Quelques aspects de la physique statistique des milieux granulaires”, Laboratoire de Physique de l’Université de Bourgogne, Dijon, December 14 2001.
- Talk “Compaction des granulaires: aspects théoriques”, Groupe matière condensée et Matériaux, Université de Rennes I, November 12 2001.
- Talk “fluides granulaires forcés”, general seminar of S.Ph.T. (CEA Saclay), October 23 2001.
- Talk “Heated granular fluids: the random restitution coefficient approach”, research workshop on “Challenges in granular physics”, Trieste, Italy, August 7-11 2001.
- Talk “Heated granular fluids: the random restitution coefficient approach”, Statphys 21, Cancun, Mexico, July 15-20 2001.
- Talk “Compaction des granulaires: aspects théoriques”, Journées de Carry “Viellissement et matière désordonnée”, Carry, France, June 5-7 2001.
- Talk “Heated granular fluids: the random restitution coefficient approach”, CECAM Workshop on “Computational kinetic theory:mesoscale applications”, Lyon, May 28-31 2001.
- Talk “Fluides granulaires vibrés: un modèle de sphères dures avec coefficient de restitution aléatoire”, 21st “rencontre de physique statistique de Paris”, January 25-26 2001.

Divulgation

- A. Barrat, E. Trizac, “Gaz granulaires : dynamique et effets collectifs”, bulletin de la Société Française de Physique **146**, 28 (2004).
- A. Barrat, M. Barthélémy, A. Vespignani, “Étude des réseaux par la physique statistique”, Bulletin de l’Union des Professeurs de Spéciales **212**, 11 (2005).
- Talk “Introduction aux réseaux complexes”, Fête de la Science, October 14 2005.
- Talk “Introduction aux réseaux complexes”, L.P.T., February 24 2006.
- A. Barrat, M. Barthélémy, A. Vespignani, “Réseaux complexes et physique statistique”, Images de la Physique 2006.
- A. Barrat, “Réseaux complexes et physique statistique”, L’Archicube 8, 2010.
- Public lecture of the Société Française de Physique, “De la caractérisation des réseaux complexes à l’épidémiologie quantitative”, Strasbourg, March 17 2010.
- Public lecture, CPPM, Marseille, “De la caractérisation des réseaux complexes à l’épidémiologie quantitative”, May 7, 2011.
- A. Barrat “Internet change-t-il les relations humaines? ”, La Recherche, May 2012.
- Public lecture of the Société Française de Physique, “Epidémiologie et réseaux: de la théorie à la pratique”, Nice, January 9 2014.
- Lecture at InVS “Mesure et analyse de réseaux de contacts dynamiques - Applications en épidémiologie”, January 16 2014.
- M. Génois, C. Vestergaard, A. Barrat, “Evaluer le risque épidémique à partir de données lacunaires”, Med Sci (Paris) 32 (5), 506 (2016).
- A. Barrat, “Modeling Epidemics: Back to School”, CNRS News- Feb. 15, 2016
- Public lecture “Comment mieux prédire les épidémies?”, cycle “Les Jeudis du CNRS”, délégation CNRS Provence et Corse, Marseille, Dec. 8 2016.