

Renato Lo Cigno

Publications, Talks, Awards

Keynote and Invited Talks

1. “Untethered Local Communications: From Wireless Access to Social Glue,” Invited Challenge Talk: *IEEE Wireless On-demand Network Systems and Services (WONS 2011)*, Bardonecchia, It, Jan. 26–28, 2011
2. “Schedules and Overlays: Interactions Between Information Scheduling and Topology Management in P2P Streaming,” Invited Talk: *NAPA-WINE final Workshop*, Torino, Italy, Jan. 20-21, 2011
3. “Peer-to-Peer Beyond File Sharing: Where are P2P Systems Going?,” Keynote: *6-th International Workshop on Hot Topics in P2P systems (Hot-P2P 2009)*, Roma, Italy, May 29, 2009
4. “On Some Fundamental Properties of P2P Push/Pull Protocols,” Invited Talk: “*Second International Conference on Communications and Electronics, ICCE 2008*, HoiAn, Vietnam, June 6, 2008
5. “Vehicular Communications: Bringing Together Academic Visions with Automotive Industry Needs,” Keynote: *International Workshop on Mobile Vehicular Networks (MoVeNet 2007)*, *Workshop of IEEE MASS 2007*, Pisa, Italy, Oct. 8 2007

Journal Papers

1. Gianluca Ciccarelli, Renato Lo Cigno, “Collusion in Peer-to-Peer Systems,” *Computer Networks*, Accepted for publication
2. Michele Welponer, Luca Abeni, Guido Marchetto, Renato Lo Cigno, “Measuring and reducing the impact of the operating system kernel on end-to-end latencies in synchronous packet switched networks,” *Software: Practice and Experience*, John Wiley & Sons, Ltd, Available on-line Oct. 13 2011
3. Kashif Munir, Renato Lo Cigno, Pascale Primet Vicat-Blanc, Michael Welzl, “Planning data transfers in grids: a multi-service queueing approach,” *Concurrency and Computation: Practice and Experience*, John Wiley & Sons, Ltd. Available on-line Apr. 28 2011
4. Robert Birke, Emilio Leonardi, Marco Mellia, Arpad Bakay, Tivadar Netvisor, Csaba Kiraly, Renato Lo Cigno, Fabian Mathieu, Luca Muscariello, Saverio Niccolini, Jan Seedorf, Giuseppe Tropea, “Architecture of a Network-Aware P2P-TV Application: The NAPA-WINE Approach,” *IEEE Communications Magazine*, Vol. 49, No. 6 pp.154–163, June 2011.
5. Gabriela Gheorghe, Alberto Montresor, and Renato Lo Cigno, “Security and Privacy Issues in P2P Streaming Systems: A Survey,” *P2P Networks and Applications*, Vol. 4, No. 2, pp. 75–91 (on-line Apr. 23, 2010), Springer.
6. Viet-Thang Nguyen, Renato Lo Cigno, Yoram Ofek, “Tunable Laser-based Design and Analysis for Fractional Lambda Switches,” *IEEE Transactions on Communications*, Vol. 56, No. 6, pp. 957-967, June 2008
7. D. Carra, R. Lo Cigno, E. W. Biersack, “Stochastic Graph Processes for Performance Evaluation of Content Delivery Applications in Overlay Networks,” *IEEE Transactions on Parallel and Distributed Systems*, Vol. 19, No. 2, pp. 247-261, Feb. 2008

8. D. Carra, R. Lo Cigno, E. W. Biersack, "Graph Based Analysis of Mesh Overlay Streaming Systems," *IEEE JSAC 'Advances in Peer-to-Peer Streaming Systems'*, Vol. 25, No. 9, pp. 1667-1677, Dec. 2007
9. E. W. Biersack, D. Carra, R. Lo Cigno, P. Rodriguez, P. Felber, "Overlay Architectures for File Distribution: Fundamental Performance Analysis for Homogeneous and Heterogeneous Cases," *Computer Networks*, 51(3):901-917, Feb. 2007, Elsevier.
10. E. Salvadori, R. Lo Cigno, Z. Zsoka, "Dynamic Grooming in IP over Optical Networks Based on the Overlay Architecture," *Optical Switching and Networking*, 3(2):118-133, Aug. 2006, Elsevier.
11. L. Muscariello, M. Mellia, M. Meo, M. Ajmone Marsan, R. Lo Cigno, "Markov Models of Internet Traffic and a New Hierarchical MMPP Model," *Computer Communications*, 28(16), Oct. 2005, pp. 1835-1851, Elsevier Science
12. C. Kirly, M. Garetto, M. Meo, M. Ajmone Marsan, R. Lo Cigno, "Analytical computation of completion time distributions of short-lived TCP connections," *Performance Evaluation*, Vol. 59, No. (2+3), Feb. 2005, pp. 179-197, Elsevier Science
13. R. Lo Cigno, G. Procissi, M. Gerla, "Sender-Side TCP Modifications: Performance Analysis and Design Guidelines," *Cluster Computing: Special Issue on Networking Technologies, Services and Protocols*, 8(1):35-45, 2005, Springer Science.
14. R. Battiti, R. Lo Cigno, M. Sabel, F. Orava, B. Pehrson, "Wireless LANs: From WarChalking to Open Access Networks," *Mobile Networks and Applications*, Vol. 10, 2005, pp. 275-287, Springer Science
15. Cs. Király, M. Garetto, M. Meo, M. Ajmone Marsan, R. Lo Cigno, "Analytical Computation of Completion Time Distributions of Short-Lived TCP Connections," No. 2-3, Vol. 59, pp. 179-197 *Performance Evaluation*, Vol. 59 No. 2-3, pp. 179-197, Feb. 2005, Elsevier Science
16. M. Mellia, R. Lo Cigno, F. Neri, "Measuring IP and TCP behavior on edge nodes with Tstat," *Computer Networks*, Vol. 47, No. 1, pp. 1-21, Jan. 2005, Elsevier.
17. M. Garetto, R. Lo Cigno, M. Meo, M. Ajmone Marsan, "Closed Queuing Network Models of Interacting Long-Lived TCP Flows," *IEEE/ACM Transactions on Networking*, Vol. 12, No. 2, pp. 300-313, Apr. 2004
18. M. Garetto, R. Lo Cigno, M. Meo, E. Alessio, M. Ajmone Marsan, "Modeling Short-Lived TCP Connections with Open Multiclass Queueing Networks," *Computer Networks*, Vol. 44, No. 2, pp. 153-176, Feb. 2004, Elsevier Science
19. C. Casetti, R. Lo Cigno, M. Mellia, M. Munafò, Z. Zsoka, "A New Class of QoS Routing Strategies Based on Network Graph Reduction", *Computer Networks*, Vol. 41, No. 4, pp. 475-487, Feb. 2003, Elsevier Science
20. M. Gerla, R. Lo Cigno, S. Mascolo, W. Weng, "Generalized Window Advertizing for TCP Congestion Control," *European Transaction on Telecommunication*, N.6, pp. 549-562, Nov./Dic. 2002
21. F. Blanchini, R. Lo Cigno, R. Tempo, "Robust Rate Control for Integrated Services Packet Networks," *IEEE Transactions on Networking*, Vol. 10, N.5, pp. 644-652, Oct. 2002
22. M. Ajmone Marsan, A. Bianco, R. Lo Cigno, M. Munafò, M. Baldi, "Performance of Transport Protocols over ATM Networks," *Simulation, Transactions of The Society for Modeling and Simulation International*, Special Issue on Performance Modeling and Simulation of ATM Systems and Networks, Part 2, Vol. 78, n. 4, pp. 219-230, Apr. 2002
23. C. F. Chiasserini, R. Lo Cigno, "Handovers in Wireless ATM Networks: In-Band Signaling Protocols and Performance Analysis," *IEEE Transactions on Wireless Communications*, Vol. 1, No. 1, pp. 87-100 Jan. 2002
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25. M. Ajmone Marsan, G. De Carolis, E. Leonardi, R. Lo Cigno, M. Meo, "Efficient Estimation of Call Blocking Probabilities in Cellular Mobile Telephony Networks with Customer Retrials," *IEEE Journal on Selected Areas in Communications – JSAC* Vol. 19, No. 2, February, 2001
26. M. Ajmone Marsan, G. De Carolis, E. Leonardi, R. Lo Cigno, M. Meo, "An approximate model for the computation of blocking probabilities in cellular networks with repeated calls," *Telecommunication Systems*, Vol. 15 (2000), pp. 53-62, J. C. Baltzer AG
27. C. Casetti, R. Lo Cigno, M. Mellia, "Load-Balancing Solutions for Static Routing Schemes in ATM Networks" *Computer Networks: Special Issue on Performance Modeling and Evaluation of ATM Networks*, Vol. 34 (2000), No. 1, July 2000, pp. 169–180, Elsevier Science
28. M. Ajmone Marsan, R. Lo Cigno, M. Meo, E. de Souza e Silva, "A Markovian Model for TCP over ATM", *Telecommunication Systems*, Vol. 12, No. 4 (1999), pp. 341-368, J. C. Baltzer AG
29. R. Lo Cigno, M. Gerla, "Modeling Window Based Congestion Control Protocols with Many Flows", *Performance Evaluation*, No. 36–37, Aug. 1999, pp. 289–306, Elsevier Science
30. M. Ajmone Marsan, C. F. Chiasserini, A. Fumagalli, R. Lo Cigno, M. Munafò, "Local and Global Handover Based on In-Band Signaling in Wireless ATM Networks" *ACM Mobile Computing and Communication Review*, Vol. 2, No. 3, July 1998, pp. 28–36
31. M. Ajmone Marsan, A. Bianco, C. Casetti, C. F. Chiasserini, A. Francini, R. Lo Cigno, M. Munafò, "An Integrated Simulation Environment for the Analysis of ATM Networks at Multiple Time Scales" *Computer Networks and ISDN Systems, Special Issue on Modeling of Wired - and Wireless - ATM Networks*, Vol. 29, No. 17-18, Feb. 1998, pp. 2165–2185
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34. M. Ajmone Marsan, A. Bianco, T. V. Do, L. Jereb, R. Lo Cigno, M. Munafò, "ATM Simulation with CLASS" *Performance Evaluation, Performance Modeling Tools*, No. 24, pp. 137–159, 1995
35. E. Bahya, R. Lo Cigno, S. Rasmussen, "Validation Tests of TOPSIM IV" *ESA Scientific and Technical Memoranda*, Vol. 249, July 1993
36. G. Albertengo, F. Borgonovo, P. L. Civera, L. Fratta, R. Lo Cigno, G. Panizzardi, G. Piccinini, M. Zamboni, "Deflection Network: Principles, Implementation, Services" *European Transaction on Telecommunication*, Vol. 3, No. 2, Mar-Apr, 1992

Edited Books and Journals

1. R. Battiti, M. Conti, R. Lo Cigno (Eds.), *Wireless On-Demand Network Systems, Proc. of the 1-st IFIP TC6 Working Conference, WONS 2004*, Madonna di Campiglio, IT, Lecture Notes on Computer Science, LNCS 2928, Springer, 2005
2. N. Abu-Ghazaleh, E. Alba, C.-F. Chiasserini, R. Lo Cigno (Eds.), '*Performance of Wireless Networks*' *Special Issue, Computer Networks*, Vol. 52, Issue 1, Jan. 2008, Elsevier

Book Chapters

1. M. Ajmone Marsan, T. V. Do, L. Jereb, R. Lo Cigno, R. Pasquali, A. Tonietti, “Simulation of Traffic Shaping Algorithms in ATM Networks” in: D. Kouvatsos (editor), *Performance Modelling and Evaluation of ATM Networks* Chapman and Hall, London, 1995
2. M. Ajmone Marsan, A. Bianco, R. Lo Cigno, M. Munafò, “Some Simulation Results about Shaped TCP Connections in ATM Networks” in: D. Kouvatsos (editor), *Performance Modelling and Evaluation of ATM Networks, Vol. 2* Chapman and Hall, London, 1996
3. M. Ajmone Marsan, A. Bianco, R. Lo Cigno, M. Munafò, “Four Standard Control Theory Approaches for the Implementation of RRM ABR Services” in: D. Kouvatsos (editor), *Performance Modelling and Evaluation of ATM Networks, Vol. 3* Chapman and Hall, London, 1997
4. M. Ajmone Marsan, R. Lo Cigno, M. Munafò, “Simulazione di Reti ATM” in: A. Tonietti (editor), *Controllo del Traffico e Dimensionamento di Reti ATM* CSELT, Collana ATM, Torino, 1997
5. M. Ajmone Marsan, A. Bianco, C. Casetti, P. Castelli, R. Lo Cigno, M. Mellia, M. Munafò, “A Simulation Analysis of a QoS-Based CAC Algorithm for ATM Networks” in: D. Kouvatsos (editor), *Performance Analysis of ATM Networks*, Kluwer Academic Publishers, Boston, MA, USA, 1999
6. R. Lo Cigno, “Wireless ATM: An Introduction and Performance Issues,” in: D. Kouvatsos (editor) *Performance Modelling and Applications of ATM Networks*, Kluwer, Nowell, MA, USA, 2000
7. M. Gerla, W. Weng, R. Lo Cigno, “Enforcing Fairness with Active Network Feedback in the Internet”, in: D. Skellen, A. Guha, F. Neri (editors) *Evolving Access and Networking Techniques*, IEEE C.N. 99EX512, ISBN 0-7803-7172-0, IEEE, USA, 2001
8. Cs. Kiraly, S. Teofili, G. Bianchi, R. Lo Cigno, M. Nardelli, E. Delzeri, “Traffic Flow Confidentiality in IPsec: Protocol and Implementation,” In *S. Fischer Hübner, P. Duquenoy, A. Zuccato, L. Martucci, (Eds.), ‘The Future of Identity in the Information Society’*, Series: IFIP International Federation for Information Processing, Vol. 262, July 2008, XII, Springer

International Conference Papers

1. Michele Segata, Renato Lo Cigno, “Emergency Braking: A study of Network and Application Performance,” In Proc. of *The 8-th ACM International Workshop on Vehicular Inter-NETworking (VANET 2011)*, Sept. 23, 2011, Las Vegas, NE, USA
2. Naeem Khademi, Michael Welzl, Renato Lo Cigno, “On the Uplink Performance of TCP in Multi-rate 802.11 WLANs,” In Proc. *IFIP NETWORKING 2011, Lecture Notes in Computer Science*, Vol. 6641, Springer, pp. 368–378, May 6–13, 2011, Valencia, SP
3. Matteo Ceriotti, Michele Corrà, Leandro D’Orazio, Roberto Doriguzzi, Daniele Facchin, Stefan Guna, Gian Paolo Jesi, Renato Lo Cigno, Luca Mottola, Amy L. Murphy, Massimo Pescalli, Gian Pietro Picco, Denis Pregnotato, Carloalberto Torghese, “Is There Light at the Ends of the Tunnel? Wireless Sensor Networks for Adaptive Lighting in Road Tunnels,” In Proc. of the 10-th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN 2011, SPOTS track), pp. 187–198, April 12–14, 2011, Chicago (IL, USA)
This paper received the Best Paper Award
4. Renato Lo Cigno, “Untethered Local Communications: From Wireless Access to Social Glue,” In Proc. *IEEE/IFIP WONS 2011, The 6-th Annual Conference on Wireless On demand Network Systems and Services*, Invited Challenge Talk, Bardonecchia, IT, Jan. 26–28, 2011
5. Csaba Kiraly, Renato Lo Cigno, Luca Abeni, “Deadline-based Differentiation in P2P Streaming,” In Proc. *IEEE Global Communications Conference (IEEE GLOBECOM 2010)*, Miami, FL, USA, Dec. 6–9, 2010

6. Luca Abeni, Csaba Kiraly, Renato Lo Cigno, "Effects of P2P Streaming on Video Quality," In Proc. *IEEE International Conference on Communications (ICC'10)*, Cape Town, South Africa, May 23–27, 2010.
7. Marco Ajelli, Alberto Montresor, Renato Lo Cigno, "Modeling Botnets and Epidemic Malware," In Proc. *IEEE International Conference on Communications (ICC'10)*, Cape Town, South Africa, May 23–27, 2010.
8. Luca Abeni, Csaba Kiraly, Renato Lo Cigno, "Robust Scheduling of Video Streams in Network-Aware P2P Applications," In Proc. *IEEE International Conference on Communications (ICC'10)*, Cape Town, South Africa, May 23–27, 2010.
9. Alessandro Russo, Renato Lo Cigno, "Delay-Aware Push/Pull Protocols for Live Video Streaming in P2P Systems," In Proc. *IEEE International Conference on Communications (ICC'10)*, Cape Town, South Africa, May 23–27, 2010.
10. Luca Abeni, Csaba Kiraly, Renato Lo Cigno, "Scheduling P2P Multimedia Streams: Can We Achieve Performance and Robustness?," *3-rd IEEE International Conference on Internet Multimedia Systems Architecture and Applications (IMSAA-09)*, Bangalore, IN, Dec. 9–11, 2009
11. Luca Abeni, Csaba Kiraly, Renato Lo Cigno, "SSSim: a Simple and Scalable Simulator for P2P Streaming Systems," In Proc. *14th IEEE International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (IEEE CAMAD '09)*, Pisa, IT, June 12, 2009
12. Csaba Kiraly, Renato Lo Cigno, "IPsec-based Anonymous Networking: A Working Implementation," it In Proc. *IEEE International Conference on Communications (ICC 2009)*, Dresden, DE, June 14–18, 2009
13. F. Menna, R. Lo Cigno, S. Niccolini, S. Tartarelli, "Simulation of SPIT Filtering: Quantitative Evaluation of Parameter Tuning," it In Proc. *IEEE International Conference on Communications (ICC 2009)*, Dresden, DE, June 14–18, 2009
14. R. Lo Cigno, T. Pecorella, M. Sereno, L. Veltri, "Peer-to-Peer Beyond File Sharing: Where are P2P Systems Going?," In Proc. of *6-th International Workshop on Hot Topics in P2P systems (Hot-P2P 2009 - IPDPS 2009)* (Invited Keynote Paper), Rome, Italy, May 29, 2009
15. L. Abeni, C. Kiraly, R. Lo Cigno, "On the Optimal Scheduling of Streaming Applications in Unstructured Meshes," In Proc. *IFIP Networking 2009*, Aachen, Germany, May 11–15, 2009
16. R. Lo Cigno, M. Nardelli, M. Welzl, "An EnergySavvy, ApplicationAware MAC," in Proc *IEEE/IFIP WONS 2009, The 6-th Annual Conference on Wireless On demand Network Systems and Services*, Feb. 2-4, 2009, Snowbird, UT, USA
17. Z. Zsóka, R. Lo Cigno, B. Farkas, "Augmented Grooming in Networks with Elastic Traffic, *2008 International Symposium on Performance Evaluation of Computer and Telecommunication Systems – SPECTS 2008*, June 16–18, 2008, Edinburgh, UK
18. R. Lo Cigno, A. Russo, D. Carra, "On Some Fundamental Properties of P2P Push/Pull Protocols," In Proc. "Second International Conference on Communications and Electronics, *ICCE 2008*, HoiAn, Vietnam, pp. 67–73, June 4–6, 2008
19. Viet-Thang Nguyen, R. Lo Cigno, Y. Ofek, M. Telek, "Time Blocking Analysis in Time-driven Switching Networks," *IEEE INFOCOM 2008*, Apr. 15–17, 2008, Phoenix, AZ, USA
20. F. Soldo, R. Lo Cigno, M. Gerla, "Cooperative Synchronous Broadcasting in Infrastructure-to-Vehicles Networks," in Proc *IEEE/IFIP WONS 2008, The 5-th Annual Conference on Wireless On demand Network Systems and Services*, Jan. 23–25, 2008, Garmisch-Partenkirchen, Germany
21. G. Costanzi, R. Lo Cigno, A. Ghittino, S. Annese "Route Stabilization in Infrastructured Wireless Mesh Networks: an OLSRD Based Solution," in Proc *IEEE/IFIP WONS 2008, The 5-th Annual Conference on Wireless On demand Network Systems and Services*, Jan. 23–25, 2008, Garmisch-Partenkirchen, Germany

22. L. Palopoli, R. Lo Cigno, A. Colombo, "Control and Optimisation of HCCA 802.11e Access Scheduling," *46-th IEEE conference on decision and control (CDC 2007)*, New Orleans, MI, USA, Dec. 12–14, 2007, pp. 4427–4432
23. L. Palopoli, R. Lo Cigno, A. Colombo, "Analysis of Different Scheduling Strategies in 802.11e Networks with Multi-Class Traffic," *32nd IEEE Conference on Local Computer Networks (LCN 2007)*, Dublin, Ireland, Oct. 15–18, 2007, pp. 455–462
24. D. Carra, R. Lo Cigno, E. W. Biersack, "Graph Based Modeling of P2P Streaming Systems," in *Proc. of IFIP Networking 2007*, May 14–28, 2007, Atlanta, GA, USA, pp. 594–605
25. D. Carra, R. Lo Cigno, E. W. Biersack, "Fast Stochastic Analysis of P2P File Distribution Architectures," in *Proc. of IEEE Globecom 2006*, Nov. 27–Dec. 1, San Francisco, CA, USA.
26. D. Carra, R. Lo Cigno, E. W. Biersack, "Content Delivery in Overlay Networks: a Stochastic Graph Processes Perspective," in *Proc. of IEEE Globecom 2006*, Nov. 27–Dec. 1, San Francisco, CA, USA
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27. Viet-Thang Nguyen, R. Lo Cigno, Y. Ofek, "Design and Analysis of Tunable Laser-based Fractional λ Switching (F λ S)," *IEEE INFOCOM 2006*, Apr. 23–29, 2006 Barcelona, Spain
28. M. Brunato, R. Lo Cigno, D. Severina, "Managing Wireless HotSpots: the Uni-Fy Approach" In *Proc. MedHocNet 2006*, Lipari (ME), Italy, June 14-17, 2006
29. P. Larcheri, R. Lo Cigno "Scheduling in 802.11e: Open-Loop or Closed-Loop?" , *IEEE WONS 2006*, Jan. 18–20 2006, Les Ménuires, FR
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30. D. Carra, R. Lo Cigno, "Stochastic Analysis of Chain Based File Distribution Architectures with Heterogeneous Peers" *Tenth IEEE International Workshop on Web Content Caching and Distribution (WCW)*, Sept. 12–13, 2005, Sophia Antipolis, France
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32. P. Laface, D. Carra, R. Lo Cigno, "A Performance Model for Multimedia Services Provisioning on Network Interfaces," in *Proc. of QoSIP2005 – Quality of Service in Multiservice IP Networks, Third International Workshop*, Catania, Italy, Feb. 2–4 2005, LNCS, Springer
33. R. Lo Cigno, E. Salvadori, Z. Zsóka, "Elastic Traffic Effects on WDM Dynamic Grooming Algorithms," In *Proc. of IEEE Globecom 2004*, Dallas, TX, USA, Nov. 29–Dec. 3, 2004
34. L. Muscariello, M. Mellia, M. Meo, M. Ajmone Marsan, R. Lo Cigno, "An MMPP-Based Hierarchical Model of Internet Traffic," In *Proc. IEEE International Conference on Communications – ICC 2004*, Paris, France, June 20–24, 2004
35. M. Garetto, M. Ajmone Marsan, R. Lo Cigno, M. Meo, "On the Convergence of Fixed Point Approximations to Study Congested Networks Loaded by TCP Traffic," In *Proc. of IEEE Globecom 2003*, S. Francisco, CA, USA, Dec. 1–5, 2003, pp. 3133–3137
36. R. Battiti, R. Lo Cigno, F. Orava, B. Pehrson, "Global Growth of Open Access Networks: from WarChalking and Connection Sharing to Sustainable Business," In *Proc. of ACM WMASH'03*, San Diego, CA, USA, Sept. 19, 2003
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38. G. Mardente, C. Casetti, R. Lo Cigno, M. Mellia, M. Munafò, "On-line Routing Optimization for MPLS-based IP Networks," in *Proc. of IEEE High Performance Switching and Routing (HPSR 2003)*, Turin, Italy, June 25-27, 2003
39. R. Fracchia, M. Garetto, R. Lo Cigno "A Queueing Network Model of Short-Lived TCP Flows with Mixed Wired and Wireless Access Links," in *Proc. of QoSIP2003 – Quality of Service in Multiservice IP Networks, Second International Workshop*, Milano, Italy, Feb. 24–26 2003, LNCS2601, pp. 405-418, Springer
40. M. Bagnus, R. Lo Cigno "TCP-SACK Analysis and Improvement through OMQN Models," in *Proc. of QoSIP2003 – Quality of Service in Multiservice IP Networks, Second International Workshop*, Milano, Italy, Feb. 24–26 2003, LNCS2601, pp. 392–404, Springer
41. M. Mellia, A. Carpani, R. Lo Cigno "TStat: TCP STatistic and Analisys Tool," in *Proc. of QoSIP2003 – Quality of Service in Multiservice IP Networks, Second International Workshop*, Milano, Italy, Feb. 24–26 2003, LNCS2601, pp. 145–157, Springer
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45. M. Garetto, R. Lo Cigno, M. Meo, E. Alessio, M. Ajmone Marsan, "Modeling Short-Lived TCP Connections with Open Multiclass Queueing Networks," *7-th International Workshop on Protocols For High-Speed Networks (PfHSN 2002)*, Berlin, Germany, April 22–24, 2002
46. E. Alessio, M. Garetto, R. Lo Cigno, M. Meo, M. Ajmone Marsan "Analytical Estimation of Completion Times of Mixed NewReno and Tahoe TCP Connections over Single and Multiple Bottleneck Networks," In *Proc. of IEEE Globecom 2001*, San Antonio, Texas USA, Nov. 25–29, 2001
47. C. Casetti, R. Lo Cigno, M. Mellia, M. Munafò, Z. Zsóka, "A Realistic Model to Evaluate Routing Algorithms in the Internet", In *Proc. of IEEE Globecom 2001*, San Antonio, Texas USA, Nov. 25–29, 2001
48. M. Garetto, R. Lo Cigno, M. Meo, M. Ajmone Marsan, "On the Use of Queueing Network Models to Predict the Performance of TCP Connections" *Tyrrenian International Workshop on Digital Communications – IWDC 2001*, Taormina, Italy Sept. 17–20, 2001
49. C. Casetti, R. Lo Cigno, M. Mellia, M. Munafò, Z. Zsóka, "Routing Algorithms Evaluation for Elastic Traffic", *2001 IEEE Workshop on High Performance Switching and Routing (HPSR 2001)*, Dallas, Texas USA, May 29-31, 2001
50. M. Garetto, R. Lo Cigno, M. Meo, M. Ajmone Marsan, "A Detailed and Accurate Closed Queueing Network Model of Many Interacting TCP Flows," In *Proceedings of IEEE Infocom 2001*, Anchorage, Alaska, USA, April 22-26, 2001.
51. M. Gerla, W. Weng, R. Lo Cigno, "Bandwidth feedback control of TCP and real time sources in the Internet," In *Proc. of IEEE Globecom 2000*, San Francisco, CA, USA, Nov. 27 – Dec. 1 2000.
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53. M. Gerla, W. Weng, R. Lo Cigno, "BA-TCP: A Bandwidth Aware TCP for Satellite Networks," *8-th International Conference on Computer Communications and Networks ICCCN'99*, Boston-Natick, MA, USA, Oct. 11-13, 1999

54. M. Ajmone Marsan, G. De Carolis, E. Leonardi, R. Lo Cigno, M. Meo, "How Many Cells Should Be Considered to Accurately Predict the Performance of Cellular Networks?," *European Wireless'99*, Munich, Germany, Oct. 6-8, 1999
55. C. Casetti, R. Lo Cigno, M. Mellia, "QoS-Aware Routing Schemes Based on Hierarchical Load-Balancing for Integrated Services Packet Networks," *International Conference on Communications ICC'99*, Vancouver, Canada, June 6-10, 1999
56. M. Ajmone Marsan, G. De Carolis, E. Leonardi, R. Lo Cigno, M. Meo, "An Approximate Model for the Computation of Blocking Probabilities in Cellular Networks with Repeated Calls," *11th ITC Specialists Seminar "Multimedia and Nomadic Communications"*, Yokohama, Japan, Oct. 27-29, 1998
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2. C. Kiraly, R. Lo Cigno, "On the Effects of Overlay Localization on P2P Networks," *In Proc. IEEE Infocom 2009 Student Workshop* (poster + extend abstract), Rio de Janeiro, BR, April 20, 2009
3. A. Russo, R. Lo Cigno, "Push/Pull Protocols for Streaming in P2P System," *In Proc. IEEE Infocom 2009 Student Workshop* (poster + extend abstract), Rio de Janeiro, BR, April 20, 2009
4. Luca Mottola, Matteo Ceriotti, Roberto Doriguzzi, Stefan Guna, Renato Lo Cigno, Amy L. Murphy, Matteo Nardelli, Gian Pietro Picco, Carloalberto Torghelle, "Adaptive Lighting in Road Tunnels Using Wireless Sensor Networks", *Demonstration and Extended Abstract, 1-st European TinyOS Technology Exchange (ETTX09)*, Cork, EIRE, Feb. 2009
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Patents

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