

FRANCESCO GRINGOLI

Dept. of Information Engineering, University of Brescia, via Branze 38, 25123 – Brescia, Italy
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EDUCATION

University of Brescia Italy
Ph.D. in Information Engineering February, 2002
Advisor: Prof. Costantino De Angelis
Dissertation: “All-Optical Wavelength Conversion Devices for Optical Communication Systems”

University of Padova Italy
M.Sc. in Telecommunication Engineering, Summa cum Laude October, 1998
Advisor: Prof. Costantino De Angelis
Dissertation: “All-Optical Signal Processing by means of Quadratic Non-Linearity”

EXPERIENCE

Dept. of Information Engineering, University of Brescia Brescia, Italy
Associate Professor May 2018 - Present

Dept. of Information Engineering, University of Brescia Brescia, Italy
Assistant Professor March 2005 - April 2018

NEC Laboratories Europe Heidelberg, Germany
Visiting Researcher May 2012 - July 2012

FTW (Forschungszentrum Telekommunikation Wien) Vienna, Austria
Visiting Researcher April 2007 - June 2007

Dept. of Automation Engineering, University of Brescia Brescia, Italy
System and Network Administrator November 2001 - February 2005

IRCOM, University of Limoges Limoges, France
Visiting Researcher January 1999 - June 1999

DISTINCTIONS

- Best paper award in ACM WiSec 2017 – M Schulz, F. Gringoli, D. Steinmetzer, M. Koch, M. Hollick, “Massive Reactive Smartphone-Based Jamming using Arbitrary Waveforms and Adaptive Power Control”, ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec 2017), Boston, MA, USA, July 18–20, 2017.
- Best Student Paper Award in WiSEC 2014 - D.S. Berger, F. Gringoli, N. Facchi, I. Martinovic, J. Schmitt, “Gaining Insight on Friendly Jamming in a Real-World IEEE 802.11 Network”, ACM WiSec 2014, Oxford, UK, July 23-25, 2014.

- Premio Francesco Carassa “per il miglior lavoro nel settore RETI DI TELECOMUNICAZIONI” – N. Facchi, P. Gallo, F. Gringoli, S. Paris, I. Tinnirello, A. Capone “Flexible and Modular Support for Multicast Rate Adaptation in WLANs”, Riunione annuale GTTI 2013, Ancona.
- Best Paper Award in FUNEMS 2013 - G. Bianchi, P. Gallo, D. Garlisi, F. Giuliano, F. Gringoli, I. Tinnirello, “A Control Architecture for Wireless MAC Processor Networking”, Future Network and Mobile Summit 2013, Lisbon, Portugal, July 3-5, 2013.
- Best Paper Award in WiNTECH 2011 - D. Garlisi, F. Gringoli, P. Gallo, F. Giuliano, S. Mangione, I. Tinnirello, “MAC-Engine: a new architecture for executing MAC algorithms on commodity WiFi hardware”, WiNTECH 2011 Workshop, Las Vegas (NV), USA, Sept. 19, 2011

RESEARCH INTERESTS

His current research interests include security assessment, performance evaluation and medium access control in Wireless LANs, algorithms for privacy aware authentication and trust, and high-speed packet processing for statistical classification of network traffic.

MAC algorithms for Wireless LANs

2009 - present

- Leader of the OpenFWWF project targeting the release of open-source firmware for Wi-Fi interface cards. Recent MACs built on this firmware: i) friendly jammer for securing corporate networks [26]; ii) transparent localisation of users’ terminals [19]; iii) first demo of IEEE 802.11aa for reliable multicast transmissions [29].
- Contribution to the Wireless MAC Processor (WMP), a dynamically hardware-agnostic reconfigurable MAC subsystem [30] developed during the FP7 FLAVIA Project.
- Analysis and implementation of new transmission and access techniques based on Smart Antennas for Italian SME Adant S.r.L.

Anonymous trust and authentication

2008 - present

- Analysis of the overheads of protocols for anonymous trust of authenticated data using group-signatures [46].
- Led the development of an anonymously authenticated Peer-to-Peer signalling protocol for Android Devices during the FP7 PERIMETER Project.
- Consultant for Beretta Armi S.p.A. for the development of authentication mechanisms for low power equipments with SAM devices.

High speed packet processing

2006 - present

- Demonstrated the feasibility of supervised approaches for application detection of packet sessions, based on the length of the first few exchanged packets [74] beyond 10Gb/s [40].
- Introduced methodologies for the classification of encrypted data sessions [66] and traffic aggregates like IPsec [55]: this activity led to US Patent [91].
- Analysis of high speed stream data processing on distributed multi-core architectures [34].

FUNDING

VIMARHOME

2018

Funded by VIMAR S.p.A.

EUR 3k

SALTE

2017

Funded by SME Adant S.r.L.

EUR 8k

SA Competition Funded by Zyxel Communications Corp.	2016 EUR 12k
SAS (Smart Antenna System) Funded by SME Adant S.r.L.	2013 – 2014 EUR 24k
IMPRESA (Internet Monitoring with PRivacy-PReserving Encoding and Selective Access) Italian PRIN National Project	2010 – 2011 EUR 45k
RECIPE (Robust and Efficient Classification of IP nEtwork traffic) Italian PRIN National Project	2007-2009 EUR 76k
Other local funds including teaching and lab equipments University of Brescia	2005-present EUR 20k

RECENT RESEARCH PROJECTS AND COLLABORATIONS

WiSHFUL (Wireless Software and Hardware platforms for Flexible and Unified radio and network controL) H2020 project 645274	2014-present
SmartSCUOLA National Italia project, led by University of Brescia	2014-2016
CABIN-CREW (enabling Cognitive Access BenchmarkINg over CREW) Opencall CREW - EU FP7-258301	2013-2014
iGun National Italian project, led by Beretta Armi S.p.A.	2011-2014
DEMONS (DEcentralized, cooperative, and privacy-preserving MONitoring for trustworthinesS) FP7 project 257315	2012–2013
FLAVIA (FLexible Architecture for Virtualizable wireless future Internet Access) FP7 project 257263	2011-2013
PERIMETER (User-centric paradigm for seamless mobility in the future) FP7 project 224024	2008–2011
Multi-Channel Radio Packet Transmission Collaboration with Alcatel-Lucent	2008-2011

STUDENTS SUPERVISION ACTIVITIES

Ph.D. students supervision <i>Dept. of Information Engineering</i>	2012 - present <i>University of Brescia</i>
· Nahla Ali	2014 - 2018
· Nicolò Facchi	2013 - 2016
Master students supervision <i>Dept. of Information Engineering</i>	2005 - present <i>University of Brescia</i>
· He supervised more than 30 students	

TEACHING ACTIVITIES

Master Degree in “Communication Technologies and Multimedia” <i>Dept. of Information Engineering</i>	Fall 2012 - present <i>University of Brescia</i>
· Network Security, 6 credits	Fall 2012 - present
· Traffic Modelling and Streaming, 3 credits	Fall 2012 - 2015
Master Degree in “Telecommunication Engineering” <i>Dept. of Information Engineering</i>	Fall 2005 - Spring 2012 <i>University of Brescia</i>
· Network Security, 5 credits	Fall 2011
· Lab Instructor for Network Security	Fall 2006 - 2010
· Traffic Modelling, 5 credits	Fall 2006 - 2011
· Lab Instructor for Traffic Modelling	Fall 2005
Bachelor Degree in “Telecommunication and Electronic Engineering” <i>Dept. of Information Engineering</i>	Fall 2005 - present <i>University of Brescia</i>
· Advanced Telecommunication Network, 3 credits	Fall 2015
· Telecommunication Network, 9 credits	Fall 2013
· Telecommunication Network B, 5 credits	Fall 2009
· Lab Instructor for Telecommunication Network B	Fall 2006 - 2008
· Lab Instructor for Electrical Communications A	Fall 2005 - 2006
· Lab Instructor for Electrical Communications B	Fall 2005 - 2006

TECHNICAL STRENGTHS

System Modelling	Markov Chain theory for modelling access protocols and queue behaviour; statistical modelling with multi-variate distributions; clustering techniques.
Performance analysis	Complex testbeds with lot of nodes; remote experiment automation and management; performance metric collection.
Languages	C, C++, Java, Python, Perl, Matlab. Ability to design, implement and debug complex applications, with multi-thread, asynchronous IO, network programming including raw socket, memory management.
System programming	Deep knowledge of the Linux Network Kernel Stack and the driver interface with Network Cards; parallel programming in multi-core platform; Non-Uniform Memory Access.
System Management	Twenty years experience with Linux. Deep knowledge of FreeBSD, OS X and cut-down distributions for embedded computing (OpenWRT and DD-WRT).

LANGUAGE SKILLS

- **English** - Written and oral fluency
- **Italian** - Native speaker
- **French** - Basic

PEER REVIEWED PUBLICATIONS

1. F. Gringoli, P. Patras, C. Donato, P. Serrano, and Y. Grunenberger, "Performance Assessment of Open Software Platforms for 5G Prototyping", *IEEE Wireless Communication Magazine*, In Press.
2. M. Schulz, J. Link, F. Gringoli, and M. Hollick, "Shadow Wi-Fi: Teaching Smartphones to Transmit Raw Signals and to Extract Channel State Information to Implement Practical Covert Channels over Wi-Fi", *16th ACM International Conference on Mobile Systems, Applications, and Services (Mobisys 2018)*, Munich, Germany, Jun. 11-15, 2018.
3. F. Gringoli, N. Ali, F. Guerrini, P.O. Patras, "A Flexible Framework for Debugging IoT Wireless Applications", *MetroInd4.0 and IoT 2018*, Brescia, Italy, Apr. 16-18, 2018.
4. F. Gringoli, R. Klose, M. Hollick, N. Ali, "Making Wi-Fi Fit for the Tactile Internet: Low-Latency Wi-Fi Flooding Using Concurrent Transmissions", *2018 IEEE International Conference on Communications Workshops (ICC Workshops)*, Kansas City, MO, US, May 20-24, 2018.
5. N. Facchi, F. Gringoli, P. Patras, "Maximising the utility of enterprise millimetre-wave networks", *Elsevier Computer Communications*, 119, pp. 29-42, Apr. 2018.
6. F. Ricciato, S. Sciancalepore, F. Gringoli, N. Facchi, G. Boggia, "Position and Velocity Estimation of a Non-cooperative Source From Asynchronous Packet Arrival Time Measurements", *IEEE Transactions on Mobile Computing*, In Press.
7. M. Schulz, F. Knapp, E. Deligeorgopoulos, D. Wegemer, F. Gringoli, M. Hollick, "DEMO: Nexmon in action: Advanced applications powered by the nexmon firmware patching framework", *WiNTECH 2017*, Snowbird, US, Oct. 2017.
8. A. Azcorra, I. Ucar, F. Gringoli, A. Banchs, P. Serrano, "muNap: Practical micro-sleeps for 802.11 WLANs", *Elsevier Computer Communications*, 110(15), pp. 175-186, Sept. 2017.
9. M. Schulz, E. Deligeorgopoulos, M. Hollick, F. Gringoli, "DEMO: Demonstrating reactive smartphone-based jamming", *ACM WiSEC 2017*, Boston, US, July 18-20, 2017.
10. M. Schulz, F. Gringoli, D. Steinmetzer, M. Koch, M. Hollick, "Massive Reactive Smartphone-Based Jamming using Arbitrary Waveforms and Adaptive Power Control", *WiSEC 2017*, Boston, MA, US, July 18-20, 2017.
11. N. Facchi, F. Gringoli, D. Malone, P. Patras, "Imola: A decentralised learning-driver protocol for multi-hop White-Fi", *Elsevier Computer Communications*, 105(1), pp. 157-168, June 2017.
12. F. Maturi, F. Gringoli, R. Lo Cigno, "A dynamic and autonomous channel selection strategy for interference avoidance in 802.11", *WONS 2017*, Jackson Hole, WY, US, Feb. 21-24, 2017.
13. L. Sanabria-Russo, J. Barcelo, B. Bellalta, F. Gringoli, "A High Efficiency MAC Protocol for WLANs: Providing Fairness in Dense Scenarios", *IEEE Transactions on Networking*, 25(1), pp. 492-505, 2017.
14. D.S. Berger, F. Gringoli, N. Facchi, I. Martinovic, and J. Schmitt, "Friendly Jamming on Access Points: Analysis and Real-World Measurements", *IEEE Transactions on Wireless Communications*, 15(9), pp. 6189-6202, 2016.

15. S. Rinaldi, P. Ferrari, A. Flamini, M. Loda, N. Ali, F. Gringoli, "An application of IEEE 802.11ac to Smart Grid automation based on IEC 61850", IECON 2016, Firenze, Italy, Oct. 24-27, 2016
16. C. Capretti, F. Gringoli, N. Facchi, P. Patras, "LTE/Wi-Fi co-existence under scrutiny: An empirical study", WiNTECH/MOBICOM 2016, New York, US, Oct. 3-7, 2016
17. N. Facchi, F. Gringoli, D. Malone, and P. Patras, "When Is the Right Time to Transmit in Multi-hop White-Fi?", WoWMoM Demo, Coimbra, Portugal, June 21-24, 2016.
18. E. Costa Alfaia, M. Dusi, L. Fiori, F. Gringoli, S. Niccolini, "Fault-Tolerant Streaming Computation with BlockMon", Proceedings of IEEE Globecom 2015, San Diego, US, Dec. 6-10, 2015.
19. N. Facchi, F. Gringoli, F. Ricciato, A. Toma, "Emitter localisation from reception timestamps in asynchronous networks", Elsevier Computer Networks (COMNET), Vol.88, September 2015, pp.202-217.
20. S. Rinaldi, P. Ferrari, N. Ali, F. Gringoli, "IEC 61850 for Micro Grid Automation over Heterogeneous Network: Requirements and Real Case Deployment", Proceedings of IEEE INDIN 2015, Cambridge, UK, July 22-24, 2015.
21. P. Salvador, F. Gringoli, P. Serrano, N. Facchi, S. Paris, "Making a Case for Flexible 802.11 Architectures", Proceedings of IEEE ICC 2015, London, UK, June 8-12, 2015.
22. L. Sanabria-Russo, F. Gringoli, J. Barcelo, B. Bellalta, "Implementation and Experimental Evaluation of a Collision-Free MAC Protocol for WLANs", Proceedings of IEEE ICC 2015, London, UK, June 8-12, 2015.
23. F. Gringoli, S. Paris, N. Facchi, et al "Modeling and Simulation of Computer Networks and Systems", Elsevier, May 2015.
24. N. Facchi, F. Gringoli, D.S. Berger, "A Testbed to Evaluate Frequency-Hopping Anti-Jamming Techniques in IEEE 802.11". WiNTECH 2014 Workshop, Maui, Hawaii, USA, Sept. 7, 2014.
25. M. Dusi, R. Bifulco, F. Gringoli, F. Schneider, "Reactive Logic in Software-Defined Networking: Measuring Flow-Table Requirements". TRAC Workshop 2014, Nicosia, Cyprus, Aug. 4-8, 2014.
26. D.S. Berger, F. Gringoli, N. Facchi, I. Martinovic, J. Schmitt, "Gaining Insight on Friendly Jamming in a Real-World IEEE 802.11 Network". Proceedings of ACM WiSec 2014, Oxford, UK, July 23-25, 2014.
27. P. Salvador, V. Mancuso, P. Serrano, F. Gringoli, A. Banchs, "VoIPiggy: Analysis and Implementation of a Mechanism to Boost Capacity in IEEE 802.11 WLANs Carrying VoIP traffic". IEEE Transactions on Mobile Computing, 13(7), 1640-1652, 2014.
28. G. Nassopoulos, D. Rossi, F. Gringoli, L. Nava, M. Dusi, P.M. Santiago del Rìo, "Flow Management at Multi-Gbps: Tradeoffs and Lessons Learned". TMA Workshop 2014, London (UK), April 14, 2014.
29. P. Salvador, L. Cominardi, F. Gringoli, P. Serrano, "A First Implementation and Evaluation of the IEEE 802.11aa Group Addressed Transmission Service". ACM Computer Communication Review, 44(1):36-41, 2014.
30. P. Gallo, D. Garlisi, F. Giuliano, F. Gringoli, I. Tinnirello, G. Bianchi, "Wireless MAC Processor Networking: A Control Architecture for Expressing and Implementing High-Level Adaptation Policies in WLANs". IEEE Vehicular Technology Magazine, 8(4), 81-89, 2013.
31. F. Gringoli, N. Facchi, P. Gallo, D. Garlisi, F. Giuliano, G. Bianchi, "Enabling Cognitive-Radio Paradigm on Commercial Off-The-Shelf 802.11 Hardware". WINTTECH 2013 Workshop, Miami (FL), USA, Sept. 30, 2013.

32. N. Facchi, P. Gallo, F. Gringoli, S. Paris, I. Tinnirello, A. Capone, "Flexible and Modular Support for Multicast Rate Adaptation in WLANs". Future Network and Mobile Summit 2013, Lisbon, Portugal, 03-05 July, 2013.
33. G. Bianchi, P. Gallo, D. Garlisi, F. Giuliano, F. Gringoli, I. Tinnirello, "A Control Architecture for Wireless MAC Processor Networking". Future Network and Mobile Summit 2013, Lisbon, Portugal, 03-05 July, 2013.
34. D. Simoncelli, M. Dusi, F. Gringoli, S. Niccolini, "Stream-monitoring with BlockMon: convergence of network measurements and data analytics platforms". ACM Computer Communication Review, 43(2):30-35, 2013.
35. P. Gallo, D. Garlisi, F. Giuliano, F. Gringoli, I. Tinnirello, "WMPS: A Positioning System for Localizing Legacy 802.11 Devices". IEEE Transactions on Smart Processing and Computing, 1(2):124, 2013.
36. S. Paris, N. Facchi, F. Gringoli, A. Capone, "An Innovative Rate Adaptation Algorithm for Multicast Transmissions in Wireless LANs". VTC 2013 Spring, Dresden, Germany, 2-5 June, 2013.
37. D. Garlisi, F. Giuliano, I. Tinnirello, P. Gallo, F. Gringoli, G. Bianchi, "Deploying Virtual MAC Protocols Over a Shared Access Infrastructure Using MACLETs". IEEE INFOCOM 2013 Workshop, Turin, Italy, April 14-19, 2013.
38. D. Simoncelli, M. Dusi, F. Gringoli, S. Niccolini, "Scaling out the Performance of Service Monitoring Applications with BlockMon". PAM 2013, Hong Kong, PRC, March 18-19, 2013.
39. G. Bianchi, P. Gallo, D. Garlisi, F. Giuliano, F. Gringoli, I. Tinnirello, "MAClets: Active MAC Protocols over hard-coded devices". ACM CoNEXT 2012, Nice, France, December 10-13, 2012.
40. P.M. Santiago del Rio, D. Rossi, F. Gringoli, L. Nava, L. Salgarelli, J. Aracil, "Wire-speed statistical classification of network traffic on commodity hardware". IMC 2012, Boston (MA), USA, November 14-16, 2012.
41. F. Gringoli, L. Nava, A. Este, L. Salgarelli, "MTCLASS: Enabling statistical traffic classification of multi-gigabit aggregates on inexpensive hardware". IWCMC 2012, Limassol, Cyprus, August 27-30, 2012.
42. A. Este, F. Gringoli, L. Salgarelli, "MTCLASS: Traffic Classification on High-Speed Links with Commodity Hardware". IEEE ICC 2012, Ottawa, Canada, June 10-15, 2012.
43. P. Salvador, F. Gringoli, V. Mancuso, P. Serrano, A. Mannocci, A. Banchs, "VoIPiggy: Implementation and evaluation of a mechanism to boost voice capacity in 802.11 WLANs". IEEE INFOCOM 2012 Mini-Conference, Orlando (FL), USA, March 25-30, 2012.
44. I. Tinnirello, G. Bianchi, P. Gallo, D. Garlisi, F. Giuliano, F. Gringoli, "Wireless MAC Processors: Programming MAC Protocols on Commodity Hardware". IEEE INFOCOM 2012, Orlando (FL), USA, March 25-30, 2012.
45. D. Garlisi, F. Gringoli, P. Gallo, F. Giuliano, S. Mangione, I. Tinnirello, "MAC-Engine: a new architecture for executing MAC algorithms on commodity WiFi hardware". WiNTECH 2011 Workshop, Las Vegas (NV), USA, Sept. 19, 2011.
46. M. Crotti, D. Ferri, F. Gringoli, M. Peli, L. Salgarelli, "PP2db: a Privacy-Preserving, P2P-based Scalable Storage System for Mobile Networks". The 7th International ICST Conference on Security and Privacy in Communication Networks (SecureComm 2011), London, UK, Sept. 7-9, 2011.
47. P. Gallo, F. Gringoli, I. Tinnirello, "On the Flexibility of the IEEE 802.11 Technology: Challenges and Directions". Future Network and MobileSummit 2011, Warsaw, Poland, June 15-17, 2011.

48. A. Este, F. Gringoli, L. Salgarelli, "On-line SVM traffic classification". The 2nd International Workshop on TRaffic Analysis and Classification (TRAC), Istanbul, Turkey, July 5-8, 2011.
49. M. Dusi, F. Gringoli, L. Salgarelli, "Quantifying the accuracy of the ground truth associated with Internet traffic traces". Elsevier Computer Networks (COMNET), Vol.55, No.5 , April 2011, pp.1158-1167.
50. M. Dusi, A. Este, F. Gringoli, L. Salgarelli, "Taking a Peek at Bandwidth Usage on Encrypted Links". The 2011 IEEE International Conference on Communications, Kyoto, Jun. 5-9, 2011.
51. M. Crotti, D. Ferri, F. Gringoli, L. Salgarelli, "Scalable, Privacy-Preserving Storage Systems for QoE Reports". Joint FP7 PERIMETER/ETSI HF workshop on Standardisation issues for user-centric seamless mobility, Sophia Antipolis, 8 Feb. 2011.
52. B. Han, F. Gringoli, L. Cominardi, "Bologna: Block-Based 802.11 Transmission Recovery". Proc. of the 2nd Wireless of the Students, by the Students, for the Students workshop (S³ 2010), co-located with ACM MobiCom and ACM MobiHoc 2010, Chicago, 20-24 September 2010.
53. M. Crotti, F. Gringoli, L. Salgarelli, "Optimizing Statistical Classifiers of Network Traffic". The 1st International Workshop on TRaffic Analysis and Classification (TRAC), Caen, June 28-July 2 2010.
54. B. Han, A. Schulman, F. Gringoli, N. Spring, B. Bhattacharjee, L. Nava, L. Ji, S. Lee, R. Miller, "Maranello: Practical Partial Packet Recovery for 802.11". USENIX NSDI'10, San Jose, 28-30 April 2010.
55. M. Dusi, A. Este, F. Gringoli, L. Salgarelli, "Coarse Classification of Internet Traffic Aggregates". The 2010 IEEE International Conference on Communications, Cape Town, 23-27 May 2010.
56. N. Cascarano, F. Risso, A. Este, F. Gringoli, L. Salgarelli, A. Finamore, M. Mellia, "Comparing P2PTV Traffic Classifiers". The 2010 IEEE International Conference on Communications, Cape Town, 23-27 May 2010.
57. N. Cascarano, A. Este, F. Gringoli, F. Risso, L. Salgarelli, "An Experimental Evaluation of the Computational Cost of a DPI Traffic Classifier". Proceedings of IEEE Globecom 2009, Honolulu, USA, Nov. 2009.
58. M. Crotti, F. Gringoli, L. Salgarelli, "Impact of Asymmetric Routing on Statistical Traffic Classification". Proceeding of IEEE Globecom 2009, Honolulu, USA, Nov. 2009.
59. F. Gringoli, L. Salgarelli, M. Dusi, N. Cascarano, F. Risso, K.C. Claffy, "GT: picking up the truth from the ground for Internet traffic". ACM SIGCOMM Computer Communication Review, Vol. 39, No. 4, Oct. 2009.
60. M. Dusi, M. Crotti, A. Este, F. Gringoli, L. Salgarelli, "Statistical Mechanisms Applied to the Classification of Tunneled and Encrypted Network Traffic". pp. 87-103: Fridericiana Editrice Universitaria, Italy, 2009
61. A. Este, F. Gringoli, L. Salgarelli, "Support Vector Machines for TCP Traffic Classification". Elsevier Computer Networks (COMNET), Vol. 53, No. 14, pp. 2476-2490, Sep. 2009.
62. M. Crotti, F. Gringoli, L. Salgarelli, "Classification of emerging protocols in the presence of asymmetric routing". Proceeding of the 20th Tyrrhenian International Workshop on Digital Communications, Pula, Italy, Sep. 2009.
63. A. Este, F. Gringoli, L. Salgarelli, "On the Stability of the Information Carried by Traffic Flow Features at the Packet Level". ACM SIGCOMM Computer Communication Review, Vol. 39, No. 3, pp. 13-18, Jul. 2009.

64. M. Dusi, F. Gringoli, L. Salgarelli, "A Model for the Study of Privacy Issues in Secure Shell Connections". *Journal of Information Assurance and Security*, Vol. 4, No. 5, pp. 382-389, Jul. 2009.
65. M. Dusi, A. Este, F. Gringoli, L. Salgarelli, "Using GMM and SVM-based Techniques for the Classification of SSH-Encrypted Traffic". *Proceedings of the 44th IEEE International Conference on Communication (ICC 2009)*, Dresden, Germany, Jun. 2009.
66. M. Dusi, M. Crotti, F. Gringoli, L. Salgarelli, "Tunnel Hunter: Detecting Application-Layer Tunnels with Statistical Fingerprinting". *Elsevier Computer Networks (COMNET)*, Vol.53, No.1, pp. 81-97, Jan. 2009.
67. A. Este, F. Gargiulo, F. Gringoli, L. Salgarelli, C. Sansone, "Pattern Recognition Approaches for Classifying IP Flows". *Proceedings of the Joint IAPR International Workshops on SSPR/SPR*, Orlando, FL, USA, Dec. 2008.
68. M. Dusi, F. Gringoli, L. Salgarelli, "A Model for the Study of Privacy Issues in Secure Shell Connections". *Proceedings of the 4th IEEE International Conference on Information Assurance and Security (IAS 2008)*, Napoli, Italy, Sep. 2008.
69. M. Dusi, F. Gringoli, L. Salgarelli, "A Preliminary Look at the Privacy of SSH Tunnels". *Proceedings of the 17th IEEE International Conference on Computer Communications and Networks (ICCCN 2008)*, St. Thomas (U.S. Virgin Islands), Aug. 2008.
70. M. Dusi, F. Gringoli, L. Salgarelli, "IP Traffic Classification for QoS Guarantees: the Independence of Packets". *Proceedings of the 1st IEEE International Workshop on IP Multimedia Communications (IPMC 2008)*, St. Thomas (U.S. Virgin Islands), Aug. 2008.
71. M. Dusi, M. Crotti, F. Gringoli, L. Salgarelli, "Detection of Encrypted Tunnels across Network Boundaries". In *Proceedings of the 43th IEEE International Conference on Communications (ICC 2008)*, Beijing (China), May 2008, pp. 1738-1744.
72. M. Crotti, M. Dusi, F. Gringoli, L. Salgarelli, "Detecting HTTP Tunnels with Statistical Mechanisms". In *Proceedings of the 42th IEEE International Conference on Communications (ICC 2007)*, Glasgow (Scotland), Jun. 2007, pp. 6162-6168.
73. L. Salgarelli, F. Gringoli, and T. Karagiannis, "Comparing Traffic Classifiers". *ACM SIGCOMM Computer Communication Review*, 37(3):65-68, 2007.
74. M. Crotti, M. Dusi, F. Gringoli, and L. Salgarelli, "Traffic Classification through Simple Statistical Fingerprinting". *ACM SIGCOMM Computer Communication Review*, 37(1):5-16, 2007.
75. M. Crotti, F. Gringoli, P. Pelosato, and Luca Salgarelli, "A statistical approach to IP-level classification of network traffic". In *Proceedings of the 41th IEEE International Conference on Communications (ICC 2006)*, Istanbul (Turkey), Jun. 2006, pp. 170-176.
76. C. Manzoni, M. Marangoni, G. Cerullo, R. Ramponi, F. Baronio, F. Gringoli, C. De Angelis, S. Takekawa, M. Nakamura, K. Kitamura, "Temporal trapping of Ultra-short Pulses at 1400nm in bulk PPSLT". In *Proceedings of the European Conference on Lasers and Electro-Optics (CLEO/Europe 2005)*, Munich (Germany), Jun. 2005, paper CD2-1-MON.
77. A. Tonello, A.D. Capobianco, G. Nalesso, F. Gringoli, and C. De Angelis, "Perturbations, internal modes and noise in dispersion-managed soliton transmission". *Optics Communications*, 246(4-6):393-403, 2005.
78. A. Locatelli, D. Modotto, F. Gringoli, D. Paloschi, A. Savio, C. De Angelis, "All optical switching in photonic crystal couplers". In *Proceedings of the 29th European Conference on Optical Communication (ECOC)*, 14th International Conference on Integrated Optics and Optical Fibre Communication (IOOC), Rimini (Italy), Sept. 2003, paper We4.P.46.

79. A.D. Capobianco, G. Nalesso, A. Tonello, F. Consolandi, C. De Angelis, F. Gringoli, "Noise evolution and soliton internal modes in dispersion-managed fiber systems". *Optics Letters*, 28:1754-1756, 2003.
80. F. Gringoli et al., "Experiments on 40 Gb/s transmission with wavelength conversion: results from the IST ATLAS project". *Fiber and Integrated Optics*, 21:371-389, 2002.
81. A. C. Cino, A. Parisi, S. Bonura, S. R. Sanseverino, A. Amoroso, A. di Falco, G. Leo, G. Assanto, F. Gringoli, C. De Angelis, "Reverse proton exchange for frequency doubling in lithium niobate waveguides". In *Proceedings of the Workshop on Fibre and Optical Passive Components 2002*, (IEEE/LEOS), Glasgow (UK), Jun. 2002, pp. 41-48.
82. V. Couderc, E. Lopez Lago, A. Barthelemy, C. De Angelis, F. Gringoli, "Trapping of a weak probe through coupling with a two-color quadratic spatial soliton". *Optics Communications*, 203:421-425, 2002.
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