

# FABRICE THEOLEYRE

CNRS Senior Researcher  
~ *Research Full Professor with tenure*

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Born in 1980, French citizen

## Professional experience

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2022–now	<b>Research Director</b> (~ Research Full Professor with Tenure) CNRS, ICube University of Strasbourg
2009–2022	<b>Researcher</b> (~ Research Associate Professor with Tenure) CNRS, ICube University of Strasbourg
2012–2013	<b>Visiting researcher</b> (2 * 1.5 week) Inje University, Korea
2007–2009	<b>Researcher (CR2)</b> (~ Research Assistant Professor with Tenure) CNRS, Grenoble Informatics Laboratory University of Grenoble
2006–2007	<b>Post Doctorate Research Fellow</b> , LSR (Systems and Networks Lab) University of Grenoble, Drakkar Team of Pr. Andrzej Duda
jan.-apr. 2006	<b>Visiting Scholar</b> , University of Waterloo, Canada Department of Electrical and Computer Engineering with Pr. Catherine Rosenberg
2003–2006	<b>Research Assistant</b> , CITI laboratory, INRIA ARES team Advisors : Pr. Fabrice Valois and Pr. Eric Fleury Topic : Self-organization and its applications for ad hoc and hybrid networks
dec. 2005	<b>Visiting Researcher</b> , INRIA of Sophia Antipolis, France CNRS / MASCOTTE group with Dr. Herve Rivano
2003	<b>Master thesis</b> , CITI laboratory (INRIA ARES team) Advisor : Dr. Fabrice Valois Topic : Virtual Structure Algorithms for MANETs

## Education

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- June. 2014      **HDR** ("habilitation à diriger des recherches") in Computer Science  
University of Strasbourg, France
- Sept. 2006      **Ph.D.** in computer science  
National Institute of Applied Sciences (INSA), Lyon, France
- 2003              **M.Sc.** in computer science  
National Institute of Applied Sciences (INSA), Lyon, France

## Publications

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### Books

- [L.1] Fabrice Theoleyre and Ai-Chun Pang, **Internet of Things and M2M Communications**, in *Rivers Publisher, Series in Information Science and Technology*, ISBN : 9788792982483, May 2013.

### Book Chapters

- [CL.1] Nazim Abdedaim, Benoit Darties, Fabrice Theoleyre, **Bandwidth and Energy Consumption Tradeoff for IEEE 802.15.4 Multihop Topologies**, in *Wireless Sensor Networks : Technology & Applications*, IntechOpen, 2012, [doi://10.5772/1100](https://doi.org/10.5772/1100).
- [CL.2] Bogdan Pavkovic and Fabrice Theoleyre, **MAC and Routing Integration in Wireless Sensor Networks**, in *Using Cross-Layer Techniques for Communication Systems*, editor Habib Rashvand and Yousef Seifi Kaviani, IGI Global, 2012, [doi://10.4018/978-1-4666-0960-0](https://doi.org/10.4018/978-1-4666-0960-0).
- [CL.3] Fabrice Theoleyre and Fabrice Valois, **Self-Organization of Ad Hoc Networks : Concepts and Impacts**, in *Wireless Ad Hoc and Sensor Networks*, Wiley, Juin 2007, [doi://10.1002/9780470610893.ch5](https://doi.org/10.1002/9780470610893.ch5).
- [CL.4] Fabrice Theoleyre and Fabrice Valois, **Auto-organisation de réseaux ad hoc : concepts et impacts**, in *Réseaux mobiles ad hoc et réseaux de capteurs (Traité IC2, série Réseaux et Télécommunications)*, p 101-128, Hermes, février 2006, ISBN : 2746212927.

### Editorials

#### 2020

- [E.1] G. Papadopoulos, F. Theoleyre, X. Vilajosana, **Editorial : Industrial Internet of Things : Specificities and Challenges**, *Internet Technology Letters*, Wiley, pages 1-5, Volume 3, n° 4, juillet 2020, [doi://10.1002/ITL2.172](https://doi.org/10.1002/ITL2.172)

#### 2015

- [E.2] F. Theoleyre, T. Watteyne , G. Bianchi , G. Tuna , V. Gungor , A-C. Pang, **Networking and Communications for Smart Cities Editorial**, *Computer Communications* , Elsevier, pp1-3, 58(1), mars 2015, [doi://10.1016/j.comcom.2015.02.001](https://doi.org/10.1016/j.comcom.2015.02.001), [Impact Factor: 3.16](#).

### Journals

#### 2023

- [J.1] R. Caminha, P. Merindol F. Theoleyre, **Enabling Privacy by Anonymization in the Collection of Similar Data in Multi-Domain IoT**, Computer Communications, Feb. 2023 [doi://10.1016/j.comcom.2023.02.022](https://doi.org/10.1016/j.comcom.2023.02.022) **Impact Factor: 3.16**

## 2022

- [J.2] M. Falek, C. Pelsser, S. Julien , F. Theoleyre, **MUSE : Multimodal Separators for Efficient Route Planning in Transportation Networks** , Transportation Science, INFORMS, Volume 56, n° 2, 2022 [doi://10.1287/trsc.2021.1104](https://doi.org/10.1287/trsc.2021.1104) **Impact Factor: 4.11**

## 2021

- [J.3] G. Papadopoulos , A. Mavromatis , A. Gallais, F. Theoleyre, **CoopStor : A Cooperative Reliable and Efficient Data Collection Protocol in Fault and Delay Tolerant Wireless Networks**, Wireless Networks, Springer, pp 367-381, Volume 27, n° 1, 2021, [doi://10.1007/s11276-020-02461-6](https://doi.org/10.1007/s11276-020-02461-6), **Impact Factor: 2.60**

- [J.4] M. Falek, A. Gallais, C. Pelsser, S. Julien , F. Theoleyre, **To Re-Route, or not to Re-Route : Impact of Real-Time Re-Routing in Urban Road Networks**, Journal of Intelligent Transportation Systems : Technology, Planning, and Operations, Taylor & Francis, [doi://10.1080/15472450.2020.1807345](https://doi.org/10.1080/15472450.2020.1807345), **Impact Factor: 4.27**

## 2020

- [J.5] V. Kotsiou, G. Papadopoulos , P. Chatzimisios , F. Theoleyre, **LDSF : Low-latency Distributed Scheduling Function for Industrial Internet of Things**, IEEE Internet of Things Journal, Institute of Electrical and Electronics Engineers (IEEE) Volume 7, n° 9, 2020, [doi://10.1109/JIOT.2020.2995499](https://doi.org/10.1109/JIOT.2020.2995499), **Impact Factor: 9.51**

- [J.6] G. Papadopoulos, F. Theoleyre, P. Thubert, **Operations, Administration and Maintenance (OAM) features for Reliable and Available Wireless (RAW) Networks**, Internet Technology Letters, Wiley, pages 1-6, Volume 3, n° 4, juillet 2020, [doi://10.1002/itl2.163](https://doi.org/10.1002/itl2.163)

## 2019

- [J.7] E. Mozafarri , M. Nassiri , F. Theoleyre, **Multipath aware Scheduling for High Reliability and Fault Tolerance in Low Power Industrial Networks**, Journal of Network and Computer Applications (JNCA), Elsevier [doi://10.1016/j.jnca.2019.05.013](https://doi.org/10.1016/j.jnca.2019.05.013), **Impact Factor: 6.28**

- [J.8] R. Teles Hermeto, A. Gallais, F. Theoleyre, **Experimental in-depth Study of the Dynamics of an Indoor Industrial Low Power Lossy Network**, Ad Hoc Networks journal, Elsevier, Volume 93, October 2019, [doi://10.1016/j.adhoc.2019.101914](https://doi.org/10.1016/j.adhoc.2019.101914) **Impact Factor: 4.11**

- [J.9] V. Kotsiou, G. Papadopoulos , P. Chatzimisios , F. Theoleyre, **Whitelisting without Collisions for Centralized Scheduling in Wireless Industrial Networks**, IEEE Internet of Things Journal, [doi://10.1109/JIOT.2019.2905217](https://doi.org/10.1109/JIOT.2019.2905217), Volume 6 (3), June 2019, **Impact Factor: 9.51**

- [J.10] V. Kotsiou, G. Papadopoulos , D. Zorbas , P. Chatzimisios , F. Theoleyre **Blacklisting-based Channel Hopping Approaches in Low-power and Lossy Networks**, IEEE Communications Magazine, pages 48-53, Volume 57 (2), February 2019, [doi://10.1109/MCOM.2018.1800362](https://doi.org/10.1109/MCOM.2018.1800362), **Impact Factor: 9.61**

## 2018

- [J.11] K. Kritsis , G. Papadopoulos , A. Gallais, P. Chatzimisios , F. Theoleyre, **A Tutorial on Performance Evaluation and Validation Methodology for Low-Power and Lossy Networks**, IEEE Communications Surveys and Tutorials, [doi://10.1109/COMST.2018.2820810](https://doi.org/10.1109/COMST.2018.2820810), **Impact Factor: 25.24.**

## 2017

- [J.12] Rodrigo Teles Hermeto, Antoine Gallais, Fabrice Theoleyre, **Scheduling for IEEE802.15.4-TSCH and slow channel hopping MAC in low power industrial wireless networks : A survey**, Computer Communications, Elsevier, vol 114(1), pp 84-105, December 2017, [doi://10.1016/j.comcom.2017.10.004](https://doi.org/10.1016/j.comcom.2017.10.004), **Impact Factor: 3.16.**

- [J.13] Sahar Ben Yaala, Fabrice Theoleyre, Ridha Bouallegue, **Cooperative resynchronization to improve the reliability of colocated IEEE802.15.4-TSCH networks in dense deployments**, Ad Hoc Networks, Elsevier, vol 64, pp 112-126, Sept. 2017, [doi://10.1016/j.adhoc.2017.07.002](https://doi.org/10.1016/j.adhoc.2017.07.002), [Impact Factor: 4.11](#).
- [J.14] Ines Hosni, Fabrice Theoleyre, **Self-Healing Distributed Scheduling for End-to-End Delay Optimization in Multihop Wireless Networks with 6TiSCH**, Computer Communications, Elsevier, vol 11(15), pp103-119, September 2017, [doi://10.1016/j.comcom.2017.05.014](https://doi.org/10.1016/j.comcom.2017.05.014), [Impact Factor: 3.16](#).
- [J.15] Thong Huynh, Fabrice Theoleyre, Won-Joo Hwang, **On the Interest of Opportunistic Anycast Scheduling for Wireless Low Power Lossy Networks**, Computer Communications, Elsevier, pp 55-65, vol 104, May 2017, [doi://10.1016/j.comcom.2016.06.001](https://doi.org/10.1016/j.comcom.2016.06.001), [Impact Factor: 3.16](#)
- [J.16] Oana Iova, Fabrice Theoleyre, Thomas Watteyne, Thomas Noël. **The Love-Hate Relationship between IEEE802.15.4 and RPL**, IEEE Communications Magazine, pp 188-194, 55(1) January 2017, [doi://10.1109/MCOM.2016.1300687RP](https://doi.org/10.1109/MCOM.2016.1300687RP), [Impact Factor: 9.61](#).

## 2015

- [J.17] Oana Iova, Fabrice Theoleyre, Thomas Noel, **Using Multiparent Routing in RPL to Increase the Stability and the Lifetime of the Network**, Ad Hoc Networks, Elsevier, pp 1-18, janvier 2015, [doi://10.1016/j.adhoc.2015.01.020](https://doi.org/10.1016/j.adhoc.2015.01.020), [Impact Factor: 4.11](#).

## 2014

- [J.18] Bogdan Pavkovic, Andrzej Duda, Won-Joo Hwang and Fabrice Theoleyre. **Efficient Topology Construction for RPL over IEEE 802.15.4 in Wireless Sensor Networks**, Ad Hoc Networks, Elsevier, volume 14, pp 25-38, August 2014, [doi://10.1016/j.adhoc.2013.08.009](https://doi.org/10.1016/j.adhoc.2013.08.009), [Impact Factor: 4.11](#).

## 2011

- [J.19] Fabrice Theoleyre and Benoit Darties. **Capacity and Energy-Consumption Optimization for the Cluster-Tree Topology in IEEE 802.15.4**, IEEE Communications Letters, vol 15(8), pp 816-818, August 2011, [doi://10.1109/LCOMM.2011.061011.110525](https://doi.org/10.1109/LCOMM.2011.061011.110525), [Impact Factor: 3.43](#).
- [J.20] Fabrice Theoleyre. **A Route-Aware MAC for Wireless Multihop Networks with a Convergecast Traffic Pattern**, Computer Networks, Elsevier, vol 55(3), pp 822-837, February 2011, [doi://10.1016/j.comnet.2010.10.018](https://doi.org/10.1016/j.comnet.2010.10.018), [Impact Factor: 4.47](#).

## 2010

- [J.21] Hervé Rivano, Fabrice Theoleyre et Fabrice Valois. **A Framework for the Capacity Evaluation of Multihops Wireless Networks**, Ad Hoc & Sensor Wireless Networks (AHSWN), Old City Publishing, 9(3), pp139-162. January 2010, [Impact Factor: 1.01](#).

## 2008

- [J.22] Fabrice Theoleyre et Fabrice Valois. **A Self-Organization Structure for Hybrid Networks**, Ad Hoc Networks, Elsevier, 6(3), pp 393-407, May 2008, [4.1110.1016/j.adhoc.2007.02.013](https://doi.org/10.1016/j.adhoc.2007.02.013), [Impact Factor: 4.11](#).

## 2007

- [J.23] Fabrice Theoleyre et Fabrice Valois. **Structure virtuelle pour une auto-organisation dans les réseaux ad hoc et hybrides**, Annals of Telecommunications, 62(1-2), pp 240-268, January 2007, <https://link.springer.com/article/10.1007/BF03253258>, [Impact Factor: 1.44](#).

## International Conferences

## 2022

- [CI.1] F. Veysi , J. Montavont, F. Theoleyre, **SDN-TSCH : Enabling Software Defined Networking for Scheduled Wireless Networks with Traffic Isolation**, in *IEEE International Symposium on Computers and Communications (ISCC)*, Rhode Island, Greece, juin 2022, [rank B](#).

## 2021

- [CI.2] F. Theoleyre, **Duocast for Wireless Industrial Networks : an Experimental Study**, in *ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM)*, Alicante, Spain, Nov. 2021, [doi://10.1145/3479239.3485696](#), [rank A](#).
- [CI.3] R. Caminha, P. Merindol F. Theoleyre, **Data Aggregation for Privacy Protection of Data Streams Between Autonomous IoT Networks**, in *IEEE Symposium on Computers and Communications (ISCC)*, Athens, Greece, Septembre 2021, [doi://](#), [rank B](#).
- [CI.4] A. Guillot, F. Theoleyre, C. Pelsser, **Fair Delegation of Digital Services Without Third Parties**, in *IEEE Symposium on Computers and Communications (ISCC)*, Athens, Greece, Septembre 2021, [doi://](#), [rank B](#).
- [CI.5] R. Juaçaba Neto, P. Merindol, F. Theoleyre, **Scalability of LPWAN for Smart City Applications**, in *IEEE International Wireless Communications and Mobile Computing Conference (IWCMC)*, Online, nov. 2020, [doi://10.1109/IWCMC51323.2021.9498698](#), [rank B](#)

## 2020

- [CI.6] R. Juaçaba Neto, P. Merindol, F. Theoleyre, **Transformation Based Routing Overlay for Privacy and Reusability in Multi-Domain IoT**, in *IEEE International Symposium on Network Computing and Applications (NCA)*, Online, nov. 2020, [rank A](#)
- [CI.7] G. Papadopoulos, F. Theoleyre, P. Thubert , N. Montavont, **IETF Reliable and Available Wireless (RAW) : Use Cases and Problem Statement**, in *International Conference on Ad-Hoc Networks and Wireless (AdHoc-Now)*, Bari, Italy, octobre 2020, [rank B](#), **invited paper**.

## 2019

- [CI.8] R. Teles Hermeto, Q. Bramas, A. Gallais, F. Theoleyre, **Analysis of the Network Attachment Delay of Mobile Devices in the Industrial Internet of Things**, in *International Conference on Ad Hoc Networks and Wireless (AdHoc-Now)*, Luxembourg, Luxembourg, novembre 2019, [doi://10.1007/978-3-030-31831-4\\_7](#), [rank B](#).
- [CI.9] R. Teles Hermeto, A. Gallais, F. Theoleyre, **Is Link-Layer Anycast Scheduling Relevant for IEEE802.15.4-TSCH Networks ?**, in *IEEE Conference on Local Computer Networks (LCN)*, Osnabrück, Germany, octobre 2019, [doi://10.1109/LCNSymposium47956.2019.9000679](#), [rank A](#)

## 2018

- [CI.10] R. Teles Hermeto, A. Gallais, F. Theoleyre, **On the (over)-Reactions and the Stability of a 6TiSCH Network in an Indoor Environment**, in *ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM)*, Montreal, Canada, Nov. 2018, [doi://10.1145/3242102.3242104](#), [rank A](#).
- [CI.11] M. Falek , C. Pelsser , A. Gallais , S. Julien , F. Theoleyre, **Unambiguous, Real-Time and Accurate Map Matching for Multiple Sensing Sources**, in *International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob)*, Oct. 2018, [doi://10.1109/WiMOB.2018.8589103](#), [rank B](#).
- [CI.12] I. Hosni , F. Theoleyre, **Adaptive k-cast Scheduling for high-reliability and low-latency in IEEE802.15.4-TSCH**, in *International Conference on Ad-Hoc Networks and Wireless (AdHoc-Now)*, Saint-Malo, France, pages 1-12, LNCS, Vol 11104, Sept. 2018, [doi://10.1007/978-3-030-00247-3\\_1](#), [rank B](#)
- [CI.13] S. Ben Yaala, F. Theoleyre, R. Bouallegue, **Performance Modeling of IEEE 802.15.4-TSCH with Shared Access and ON-OFF traffic**, in *IEEE International Wireless Communications and Mobile Computing Conference (IWCMC)*, Limassol (Cyprus), [doi://10.1109/IWCMC.2018.8450358](#), [rank B](#).

[CI.14] S. Ben Yaala, F. Theoleyre, R. Bouallegue **Experimental Analysis of the Efficiency of Shared Access in IEEE802.15.4-TSCH Networks with Sporadic Traffic**, in *IEEE International Conference on Advanced Information Networking and Applications (AINA)*, Krakow, Poland, May 2018, [doi://10.1109/AINA.2018.00015](https://doi.org/10.1109/AINA.2018.00015), acceptance rate: 27%, rank B

[CI.15] R. Teles Hermeto, A. Gallais, K. Van Laerhoven, F. Theoleyre, **Passive Link Quality Estimation for Accurate and Stable Parent Selection in Dense 6TiSCH Networks**, in *European Wireless Sensor Networks (EWSN)*, Madrid (Spain), February 2018, acceptance rate: 30%, rank A.

## 2017

[CI.16] V. Kotsiou, G. Papadopoulos, P. Chatzimizios, F. Theoleyre, **LABeL : Link-based Adaptive BLacklisting Technique for 6TiSCH Wireless Industrial Networks**, in *ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM)*, Miami (USA), novembre 2017, [doi://10.1145/3127540.312754](https://doi.org/10.1145/3127540.312754), acceptance rate: 27%, rank A.

[CI.17] V. Kotsiou, G. Papadopoulos, P. Chatzimizios, F. Theoleyre, **Is Local Blacklisting Relevant in Slow Channel Hopping Low-Power Wireless Networks ?**, in *IEEE International Conference on Communications (ICC)*, Paris, France, mai 2017, [doi://10.1109/ICC.2017.7996980](https://doi.org/10.1109/ICC.2017.7996980), acceptance rate: 38%, rank B.

## 2016

[CI.18] F. Theoleyre, G. Papadopoulos, **Experimental Validation of a Distributed Self-Configured 6TiSCH with Traffic Isolation in Low Power Lossy Networks**, in *ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM)*, Malte, Malta, novembre 2016, [doi://10.1145/2988287.2989133](https://doi.org/10.1145/2988287.2989133), acceptance rate: 27%, rank A.

[CI.19] G. Gaillard, D. Barthel , F. Theoleyre, F. Valois **Kausa : KPI-aware Scheduling Algorithm for Multi-flow in Multi-hop IoT Networks**, in *International Conference on Ad Hoc Networks and Wireless (AdHoc-Now)*, Lille, France, pages 47-61, juillet 2016, [doi://10.1007/978-3-319-40509-4](https://doi.org/10.1007/978-3-319-40509-4), acceptance rate: 37%, rank B.

[CI.20] M. Zou , J. Lu , F. Yang , M. Malaspina , F. Theoleyre, M-Y. Wu, **Distributed Scheduling of Enhanced Beacons for IEEE802.15.4-TSCH Body Area Networks**, in *International Conference on Ad Hoc Networks and Wireless (AdHoc-Now)*, Lille, France, pages 3-16, juillet 2016. **Best paper award**, [doi://10.1007/978-3-319-40509-4](https://doi.org/10.1007/978-3-319-40509-4), acceptance rate: 37%, rank B

[CI.21] S. Ben Yaala, F. Theoleyre, R. Bouallegue **Performance Study of Co-Located IEEE 802.15.4-TSCH Networks : Interference and Coexistence**, in *IEEE Symposium on Computers and Communications (ISCC)*, Messina, Italy, pages 513-518, juin 2016, [doi://10.1109/ISCC.2016.7543790](https://doi.org/10.1109/ISCC.2016.7543790), acceptance rate: 39%, rank B

[CI.22] G. Gaillard, D. Barthel , F. Theoleyre, F. Valois **High-Reliability Scheduling in Deterministic Wireless Multi-hop Networks**, in *International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, Valencia, Spain, juin 2016, [doi://10.1109/PIMRC.2016.7794839](https://doi.org/10.1109/PIMRC.2016.7794839), acceptance rate: 48%, rank B

[CI.23] I. Hosni , F. Theoleyre, N. Hamdi, **Localized Scheduling for End-to-End Delay Constrained Low Power Lossy Networks with 6TiSCH**, in *IEEE Symposium on Computers and Communications (ISCC)*, Messine, Italy, pages 507-512, juin 2016, [doi://10.1109/ISCC.2016.7543789](https://doi.org/10.1109/ISCC.2016.7543789), acceptance rate: 39%, rank B

## 2015

[CI.24] O. Iova, F. Theoleyre, T. Noël **Exploiting Multiple Parents in RPL to Improve both the Network Lifetime and its Stability**, in *IEEE International Conference on Communications (ICC)*, London, United Kingdom, juin 2015, [doi://10.1109/ICC.2015.7248389](https://doi.org/10.1109/ICC.2015.7248389), acceptance rate: 38%, rank B

[CI.25] Fan Yang, Jialiang Lu, Fabrice Theoleyre, Wei Shu, Ming-You Wu. **Dynamic Active Area Clustering with Inertial Information for Fingerprinting based Indoor Localization Systems**, in *IFIP Networking*, Toulouse, France, May 2015. [doi://10.1109/IFIPNetworking.2015.7145332](https://doi.org/10.1109/IFIPNetworking.2015.7145332), acceptance rate: 23%, rank A.



## 2014

- [CI.26] Oana Iova, Fabrice Theoleyre and Thomas Noel, **Improving the Network Lifetime with Energy-Balancing Routing : Application to RPL**, in *IFIP/IEEE Wireless and Mobile Networking Conference (WMNC)*, Vilamoura, Algarve, Portugal, May 2014, doi://10.1109/WMNC.2014.6878864, acceptance rate: 32.9%.
- [CI.27] Oana Iova, Fabrice Theoleyre, Mengchuan Zou and Jialiang Lu, **Efficient and Reliable MAC-Layer Broadcast for IEEE 802.15.4 Wireless Sensor Networks**, in *IFIP/IEEE Wireless and Mobile Networking Conference (WMNC)*, Vilamoura, Algarve, Portugal, May 2014, doi://10.1109/WMNC.2014.6878876, acceptance rate: 32.9%.
- [CI.28] Guillaume Gaillard, Dominique Barthel, Fabrice Theoleyre, Fabrice Valois **Service Level Agreements for Wireless Sensor Networks : a WSN Operator's Point of View**, in *IEEE/IFIP Network Operations and Management Symposium (NOMS)*, Krakow, Poland, May 2014, doi://10.1109/NOMS.2014.6838261, acceptance rate: 29%, rank B.

## 2013

- [CI.29] Oana Iova, Fabrice Theoleyre, Thomas Noel **Stability and Efficiency of RPL under Realistic Conditions in Wireless Sensor Networks**, in *IEEE International Symposium on Personal Indoor and Mobile Radio Communications (PIMRC)*, London, UK, Sept. 2013, doi://10.1109/PIMRC.2013.6666490, acceptance rate: 49%, rank B.
- [CI.30] Nazim Abdedaim, Fabrice Theoleyre, Martin Heusse and Andrzej Duda **Adaptive IEEE 802.15.4 MAC for Throughput and Energy Optimization**, in *IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS)*, Cambridge (MA), USA, May 2013, doi://10.1109/DCOSS.2013.44, acceptance rate: 29%, rank B.

## 2012

- [CI.31] Carina Teixeira de Oliveira, Fabrice Theoleyre and Andrzej Duda **Channel Assignment Strategies for Optimal Network Capacity of IEEE 802.11s**, in *ACM International Symposium on Performance Evaluation of Wireless Ad Hoc, Sensor, and Ubiquitous Networks (PE-WASUN)*, Paphos, Cyprus October 2012, doi://10.1145/2387027.2387037, acceptance rate: 17%.
- [CI.32] Nazim Abdedaim, Fabrice Theoleyre, Franck Rousseau and Andrzej Duda **Multi-Channel Cluster Tree for 802.15.4 Wireless Sensor Networks**, in *IEEE International Symposium on Personal Indoor and Mobile Radio Communications (PIMRC)*, Sydney, Australia, Sept. 2012, doi://10.1109/PIMRC.2012.6362853, acceptance rate: 44%, rank B.
- [CI.33] Bogdan Pavkovic, Won-Joo Hwang and Fabrice Theoleyre. **Cluster-Directed Acyclic Graph Formation for IEEE 80215.4 in Multihop Topologies**, in *IFIP/IEEE International Conference on New Technologies, Mobility and Security (NTMS)*, Istanbul, Turkey, May 2012, doi://10.1109/NTMS.2012.6208753.
- [CI.34] Huynh Thong, Ngoc-Thai Pham, Won-Joo Hwang and Fabrice Theoleyre **Stochastic Optimization for Minimum Outage in Cooperative Ad-Hoc Network**, in *IEEE International Conference on Advanced Information Networking and Applications (AINA)*, Fukuoka, Japan, March 2012, doi://10.1109/AINA.2012.72, rank B.

## 2011

- [CI.35] Bogdan Pavkovic, Fabrice Theoleyre and Andrzej Duda. **Multipath Opportunistic RPL Routing over IEEE 802.15.4**, in *ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM)*, Miami, USA, October 2011, doi://10.1145/2068897.2068929, acceptance rate: 24%, rank A.
- [CI.36] Carina T. de Oliveira, Fabrice Theoleyre and Andrzej Duda. **Connectivity in multi-channel multi-interface wireless mesh networks**, in *International Wireless Communications and Mobile Computing Conference (IWCMC)*, Istanbul (Turkey), July 2011, doi://10.1109/IWCMC.2011.5982503, acceptance rate: 35%, rank B.

## 2010

- [CI.37] Bogdan Pavkovic, Fabrice Theoleyre, Dominique Barthel, Andrzej Duda. **Experimental Analysis and Characterization of a Wireless Sensor Network Environment**, in *ACM International Symposium on Performance Evaluation of Wireless Ad Hoc, Sensor, and Ubiquitous Networks (PE-WASUN)*, Bodrum (Turkey), Oct. 2010, doi://10.1145/1868589.1868595, acceptance rate: 32%.
- [CI.38] Fabrice Theoleyre, Abdelmalik Bachir, Andrzej Duda and Kin K. Leung. **Energy Efficient Network Structure for Synchronous Preamble Sampling in Wireless Sensor Networks**, in *IEEE International Conference on Communications (ICC)*, Cape Town (South Africa), June 2010, doi://10.1109/ICC.2010.5502426, acceptance rate: 39%, rank B.
- [CI.39] Dorra Abdelali, Fabrice Theoleyre, Abdelmalik Bachir and Andrzej Duda. **Neighborhood Discovery and Activity Monitoring in Multichannel Mesh Networks**, in *IEEE Wireless Communications and Networking Conference (WCNC)*, Sydney (Australia), April 2010, doi://10.1109/WCNC.2010.5506146, acceptance rate: 37%, rank B.
- [CI.40] Abdelmalik Bachir, Fabrice Theoleyre and Andrzej Duda. **Energy-Efficient Broadcasts in Wireless Sensor Networks with Multiple Virtual Channels**, in *IEEE Wireless Communications and Networking Conference (WCNC)*, Sydney (Australia), April 2010, doi://10.1109/WCNC.2010.5506554, acceptance rate: 37%, rank B.

## 2009

- [CI.41] Mohammad Nassiri, Fabrice Theoleyre, Martin Heusse and Andrzej Duda. **Molecular MAC for Multichannel Wireless Mesh Networks**, in *IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS)*, Macau (Macau), October 2009, doi://10.1109/MOBHOC.2009.5337028, acceptance rate: 25%, rank B.
- [CI.42] Benoit Darties Fabrice Theoleyre and Andrzej Duda. **A Divide-and-Conquer Scheme for Assigning Roles in Multi-Channel Wireless Mesh Networks**, in *IEEE Conference on Local Computer Networks (LCN)*, Zurich (Switzerland), October 2009, doi://10.1109/LCN.2009.5355087, acceptance rate: 31%, rank A.
- [CI.43] Benoit Darties Fabrice Theoleyre and Andrzej Duda. **A restricted-Weakly Connected Dominating Set for Role Assignment in a Multichannel MAC for Wireless Mesh Networks**, in *IEEE Conference on Wireless and Mobile Computing, Networking and Communications (WIMOB)*, Marrakech (Morocco), October 2009, doi://10.1109/WiMob.2009.37, acceptance rate: 33%, rank B.
- [CI.44] Fabrice Theoleyre, Benoit Darties, Andrzej Duda. **Assignment of Roles and Channels for a Multichannel MAC in Wireless Mesh Networks**, in *IEEE International Conference on Computer Communications and Networks (IC3N)*, San Francisco (USA), August 2-6, 2009, doi://10.1109/ICCCN.2009.5235224, acceptance rate: 33%, rank A.
- [CI.45] Fabrice Theoleyre, Eryk Schiller, Andrzej Duda. **Efficient Greedy Geographical Non-Planar Routing with Reactive Deflection**, in *IEEE International Conference on Communications (ICC)*, Dresden (Germany), June 14-18, 2009, doi://10.1109/ICC.2009.5198972, acceptance rate: 34%, rank B.

## 2007

- [CI.46] Eryk Schiller, Paul Starzetz, Fabrice Theoleyre and Andrzej Duda, **Properties of Greedy Geographical Routing in Spontaneous Wireless Mesh Networks**, in *IEEE Global Communications Conference (GLOBECOM)*, Washington (USA), November 2007, doi://10.1109/GLOCOM.2007.937, acceptance rate: 39%, rank B.
- [CI.47] Fabrice Theoleyre, Rabih Tout et Fabrice Valois, **New metrics to evaluate mobility models properties**, in *IEEE International Symposium on Wireless Pervasive Computing (ISWPC)*, San Juan (USA), Feb. 2007, doi://10.1109/ISWPC.2007.342624.

## 2006

- [CI.48] Fabrice Theoleyre et Fabrice Valois, **On the Performances of the Routing Protocols in MANET : Classical versus Self-Organized Approaches**, in *IFIP Networking*, Coimbra (Portugal), May 2006, doi://10.1007/11753810\_68, acceptance rate: 20%, rank A



## 2005

- [CI.49] Fabrice Theoleyre et Fabrice Valois, **About the self-stabilization of a virtual topology for self-organization in ad hoc networks**, in *IEEE Self-Stabilization Symposium (SSS)*, Barcelona (Spain), Oct. 2005, [doi://10.1007/11577327\\_15](https://doi.org/10.1007/11577327_15), rank C
- [CI.50] Fabrice Theoleyre et Fabrice Valois, **Mobility management in multihops wireless access networks**, in *IFIP Personal Wireless Communications (PWC)*, Colmar (France), Aug. 2005, [doi://10.1142/9781860947315\\_0016](https://doi.org/10.1142/9781860947315_0016).
- [CI.51] Fabrice Theoleyre et Fabrice Valois, **Virtual Structure Routing in Ad Hoc Networks**, in *IEEE International Conference in Communications (ICC)*, Séoul (South Korea), June 2005, [doi://10.1109/ICC.2005.1494962](https://doi.org/10.1109/ICC.2005.1494962), acceptance rate: 35%, rank B

## 2004

- [CI.52] Fabrice Theoleyre et Fabrice Valois, **A Virtual Structure for Mobility Management in Hybrid Networks**, in *IEEE Wireless Communications and Networking Conference (WCNC)*, Atlanta (USA), March 2004, [doi://10.1109/WCNC.2004.1311331](https://doi.org/10.1109/WCNC.2004.1311331), acceptance rate: 43%, rank B

## Workshops internationaux ou short papers dans des Conférences internationales

### 2020

- [W.1] R. Juaçaba Neto, P. Merindol, F. Theoleyre, **Enabling Privacy by Aggregation with Multi-domain IoT streams**, IEEE Conference on Local Computer Networks (LCN), Sydney, Australia, nov. 2020, short paper, rank A

### 2018

- [W.2] D. Zorbas , V. Kotsiou, F. Theoleyre, G. Papadopoulos , C. Douligeris, **LOST : Localized Black-listing Aware Scheduling Algorithm for IEEE 802.15.4-TSCH Networks**, in *Wireless Days (WD)*, Dubai (United Arab Emirates), April 2018, [doi://10.1109/WD.2018.8361705](https://doi.org/10.1109/WD.2018.8361705), acceptance rate: 38%.

### 2016

- [W.3] G. Gaillard, D. Barthel , F. Theoleyre, F. Valois **Monitoring KPIs in Synchronized FTDMA Multi-hop Wireless Networks**, in *Wireless Days (WD)*, Toulouse, France, mars 2016, [doi://10.1109/WD.2016.7461516](https://doi.org/10.1109/WD.2016.7461516), acceptance rate: 35%.

### 2011

- [W.4] Carina T. de Oliveira, Fabrice Theoleyre and Andrzej Duda. **Broadcast strategies with probabilistic delivery guarantee in multi-channel multi-interface wireless mesh networks**, in *IFIP Annual Mediterranean Ad Hoc Networking Workshop (Med-Hoc-Net)*, Favigna Island, Italy. June 2011, [doi://10.1109/Med-Hoc-Net.2011.5970472](https://doi.org/10.1109/Med-Hoc-Net.2011.5970472).

### 2009

- [W.5] O. Alphand, A. Duda, M. Heusse, B. Ponsard, F. Rousseau, F. Theoleyre. **Towards the Future Internet of Sensors**, in *Tyrrhenian (International Workshop on Digital Communications)*, Pula, Sardinia (Italy), September 2009, [doi://10.1007/978-1-4419-1674-7\\_30](https://doi.org/10.1007/978-1-4419-1674-7_30).

### 2008

- [W.6] Franck Rousseau, Fabrice Theoleyre, Andrzej Duda, Andrey Krendzel, Manuel Requena-Esteso and Josep Mangués-Bafalluy, **Geo-mobility and Location Service in Spontaneous Wireless Mesh Networks**, in *ICT Mobile Summit*, Stockholm (Sweden), June 2008.
- [W.7] Mohammad Nassiri, Fabrice Theoleyre, Martin Heusse and Andrzej Duda , **Molecular Architecture for Spontaneous Wireless Mesh Networks**, in *IEEE ADHOC (Scandinavian Workshop on Wireless Ad-hoc & Sensor Networks)*, Stockholm (Sweden), May 2008.

## 2007

- [W.8] Mohammad Nassiri, Fabrice Theoleyre, Martin Heusse and Andrzej Duda, **Molecular Architecture for Autonomic Wireless Mesh Networks**, in *ACM Conext*, Student workshop, New-York (USA), Dec. 2007, [doi://10.1145/1364654.1364701](https://doi.org/10.1145/1364654.1364701).
- [W.9] Christian Ibars, Aitor del Coso, Yan Grunenberger, Fabrice Theoleyre, Franck Rousseau, **Increasing the Throughput of Wireless Mesh Networks with Cooperative Techniques**, in *IST Mobile and Wireless Communications Summit*, Budapest (Hungary), July 2007, [doi://10.1109/ISTMWC.2007.4299306](https://doi.org/10.1109/ISTMWC.2007.4299306).
- [W.10] F. Rousseau, M. Heusse, Y. Grunenberger, V. Untz, E. Schiller, P. Starzetz, F. Theoleyre, O. Alphand, A. Duda, **An Architecture for Seamless Mobility in Spontaneous Wireless Mesh Networks**, in *ACM SIGCOMM, Workshop Mobiarch (International Workshop on Mobility in the Evolving Internet Architecture)*, Kyoto (Japan), August 2007, [doi://10.1145/1366919.1366922](https://doi.org/10.1145/1366919.1366922).
- [W.11] Fabrice Theoleyre et Fabrice Valois, **Indoor experiments of self-organization and localization protocols for hybrid networks**, in *IEEE Symposium on a World of Wireless, Mobile and Multimedia Networks (WOWMOM), EXPONWIRELESS Workshop*, Helsinki (Finland), June 2007, [doi://10.1109/WOWMOM.2007.4351700](https://doi.org/10.1109/WOWMOM.2007.4351700).

## 2006

- [W.12] Hervé Rivano, Fabrice Theoleyre et Fabrice Valois, **Capacity Evaluation Framework and Validation of Self-Organized Routing Schemes**, in *IEEE International Workshop on Wireless Ad Hoc and Sensor Networks (IWWAN)*, New-York (USA), June 2006, [doi://10.1109/SAHCN.2006.288560](https://doi.org/10.1109/SAHCN.2006.288560).

## 2004

- [W.13] Fabrice Theoleyre et Fabrice Valois, **Robustness and Reliability for Virtual Topology in Wireless Multihops Access Networks**, in *Mediterranean Ad Hoc Networks Workshop*, Bodrum (Turkey), June 2004.

## Demonstrations / Posters

### 2010

- [DP.1] J. Beaudaux, A. Gallais, R. Kuntz, J. Montavont, T. Noel, D. Roth, F. Theoleyre and E. Valentin. **CASINO : Creating Alea with a Sensor-based Interactive Network — demo —**, in *ACM Conference on Embedded Networked Sensor Systems (SenSys)*, Zurich (Switzerland), Nov. 2010, [doi://10.1145/1869983.1870033](https://doi.org/10.1145/1869983.1870033), [rank A](#).

## Domestic Conferences

### 2020

- [CF.1] M. Falek, C. Pelsser, S. Julien , F. Theoleyre. *MUSE : une planification d'itinéraires inspirée de Séparateurs Multimodaux.*, in *Algotel*, Ecully, France, Sept. 2020, <https://hal.archives-ouvertes.fr/hal-02867959/>.

### 2019

- [CF.2] M. Falek, A. Gallais, C. Pelsser, S. Julien , F. Theoleyre. *De l'(in)utilité du temps-réel pour le calcul d'itinéraire dans les réseaux routiers*, in *Algotel*, Saint-Laurent-de-la-Cabrerisse, France, mai 2019, <https://hal.archives-ouvertes.fr/hal-02117230/>.

### 2014

- [CF.3] Oana Iova, Fabrice Theoleyre and Thomas Noel. **Exploiter plusieurs parents avec RPL pour améliorer la stabilité**, in *Rencontres Francophones sur les aspects Algorithmiques des Télécommunications (ALGOTEL)*, 2014, <https://hal.archives-ouvertes.fr/hal-00985047v2>

**2011**

- [CF.4] Carina T. de Oliveira, Fabrice Theoleyre and Andrzej Duda. **Evaluation de stratégies d'assignation de canaux pour IEEE 802.11s**, in *Rencontres Francophones sur les aspects Algorithmiques des Télécommunications (ALGOTEL)*, Cap Esterel, France. May 2011. <https://hal.inria.fr/inria-00587547/>.

**2009**

- [CF.5] Benoit Darties, Fabrice Theoleyre et Andrzej Duda, **Algorithme distribué pour l'assignation de rôles dans Molecular MAC, une couche MAC multicanal**, in *Colloque Francophone sur l'Ingénierie des Protocoles (CFIP)*, Strasbourg (France), Octobre 2009. <https://hal.inria.fr/inria-00419467>.

- [CF.6] Benoit Darties, Fabrice Theoleyre et Andrzej Duda, **Algorithme 2-approché pour la construction distribuée de réseaux moléculaires**, in *Poster Rencontres Francophones sur les aspects Algorithmiques des Télécommunications (ALGOTEL)*, Carry le Rouet (France), Juin 2009

**2005**

- [CF.7] Hervé Rivano, Fabrice Theoleyre et Fabrice Valois, **Influence de l'auto-organisation sur la capacité des réseaux ad hoc**, in *Rencontres Francophones sur les aspects Algorithmiques des Télécommunications (ALGOTEL)*, Hyères, France, Mai 2005.

- [CF.8] Fabrice Theoleyre et Fabrice Valois, **Routage Hybride sur structure virtuelle dans les réseaux mobiles ad hoc**, in *Colloque Francophone sur l'Ingénierie des Protocoles (CFIP)*, Bordeaux, France, Mars 2005.

**2004**

- [CF.9] Fabrice Theoleyre, Fabrice Valois, **Topologie Virtuelle pour une Organisation des Réseaux Hybrides Multi-sauts**, in *JDIR*, Lannion, France, Novembre 2004

## Drafts IETF

- [D.1] P. Thubert, G. Papadopoulos, F. Theoleyre, C. Bernardos RAW use cases, IETF, [draft-ietf-raw-use-cases](#), version 0 (mars 2019), version 1 (novembre 2019), version 2 (Mars 2020), version 3 (Mars 2020), version 4 (July 2020), ietf 0 (Oct 2020), 1 (Février 2021), 0 (Juillet 2021). **Working Group Document depuis oct. 2020.**
- [D.2] F. Theoleyre, G. Papadopoulos, G. Mirsky, Operations, administration and maintenance (OAM) features for PAW, IETF, [draft-ietf-raw-oam-support](#), version 0 (July 2019), version 1 (Novembre 2019), version 2 (Avril 2020), version 3 (July 2020), version 4 (Octobre 2019), 00 (Avril 2021), 01 (Mai 2021), 02 (Juin 2021), **Working Group Document depuis avril 2021.**
- [D.3] F. Theoleyre, G. Papadopoulos, G. Mirsky, C.J. Bernardos, Operations, administration and maintenance (OAM) features for PAW, IETF, [draft-ietf-detnet-oam-framework](#), version oam-support-0 (Octobre 2020), oam-framework-00 (mars 2021), 01 (mars 2021), ietf 00 (Avril 2021), 01 (Mai 2021), 02 (Juin 2021), 03 (Juillet 2021), **Working Group Document depuis avril 2021.**

Remarque : les drafts IETF sont renumérotés en partant de 0 une fois adoptés officiellement par le working group, comme working group document.

## Research Reports

**2011**

- [RR.1] Nazim Abdedaim and Fabrice Theoleyre, **Implementation of a WSN Module to Simulate the IEEE 802.15.4 Beacon-Enabled Mode in Multihop Topologies**, Research report HAL 00590853, May 2011. <https://hal.archives-ouvertes.fr/hal-00590853>
- [RR.2] Carina teixeira de Oliveira, Fabrice Theoleyre and Andrzej Duda, **Broadcast Strategies with Probabilistic Delivery Guarantee in Multi-Channel Multi-Interface Wireless Mesh Networks**, LIG Research report 017 / HAL 00591986, May 2011. <https://hal.archives-ouvertes.fr/hal-01473154>.

## 2006

- [RR.3] Hervé Rivano, Fabrice Theoleyre et Fabrice Valois, **About the Capacity of Flat and Self-Organized Ad Hoc and Hybrid Networks**, Rapport de recherche INRIA 5977, Septembre 2006. <https://arxiv.org/abs/cs/0609086>.

## 2005

- [RR.4] Fabrice Theoleyre et Fabrice Valois, **About the self-stabilization of a virtual topology for self-organization in ad hoc networks**, Rapport de recherche INRIA 5650, Août 2005 (long version of the paper of SSS 2005). <https://hal.inria.fr/inria-00406106>.
- [RR.5] Fabrice Theoleyre et Fabrice Valois, **Localization and Routing in Multihops Wireless Access Networks**, Rapport de recherché INRIA 5461, Janvier 2005. <https://hal.inria.fr/inria-00070545>.

## Thesis

- [T.1] Fabrice Theoleyre, **Medium Access and Efficient Use of Multihop Wireless Networks**, Habilitation à Diriger des Recherches (HDR) in Computer Science, University of Strasbourg, <https://tel.archives-ouvertes.fr/tel-01057204v2>, 25 June 2014  
**External Reviewers** : Marcelo Dias de Amorim, Mischa Dohler, Catherine Rosenberg.  
**Members** : Andrzej Duda, Fabrice Valois.  
**Garant** : Thomas Noel.  
**President** : Jean-Jacques Pansiot.
- [T.2] Fabrice Theoleyre, **Une auto-organisation et ses applications dans les réseaux ad hoc et hybrides**, PhD in Computer Science, INSA de Lyon, <https://tel.archives-ouvertes.fr/tel-00126131>, 29 Sept. 2006  
**External Reviewers** : Andrzej Duda, Thomas Noel, Ivan Stojmenovic.  
**Members** : David Simplot-Ryl.  
**Supervisors** : Eric Fleury, Fabrice Valois.  
**President** : Serge Fdida.

## Editorial Activities

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2018 - *	<b>Ad Hoc Networks</b> , associate editor, <a href="#">Impact Factor: 4.11</a>
2014	<b>Computer Communications</b> , lead guest editor, special issue <i>Communications and Networking for Smart Cities</i> , <a href="#">Impact Factor: 3.16</a>
2014	<b>Eurasip Journal of Wireless Communications and Networking</b> , guest editor, special issue <i>green wireless communications</i> , <a href="#">Impact Factor: 2.45</a>
2009 - 2013	<b>IEEE Communications Letters</b> , associate editor, <a href="#">Impact Factor: 3.43</a>
2013	co-editor with Ai-Chun Pang (National Taiwan University) of the book <b>Internet of Things and M2M Communications</b>
2012	Book <b>Using Cross-Layer Techniques for Communication Systems</b> , Advisory Editorial Board

**Chair :**

- 2022 **lead TPC co-chair**, IEEE Wimob (International Conference on Wireless and Mobile Computing, Networking and Communications), [rank B](#)
- 2020 **lead TPC co-chair**, IEEE ISCC (International Symposium on Computers and Communications ), [rank B](#)
- 20201 **workshops and tutorials chair**, IEEE **ISCC** (Symposium on Computers and Communications ), [rank B](#)
- 2020 **workshops chair**, **EWSN** (International Conference on Embedded Wireless Systems and Networks), [rank A](#)
- 2020 **workshops chair**, IEEE **ISCC** (Symposium on Computers and Communications ), [rank B](#)
- 2016 **special session chair**, **ICT'16**, Industrial Internet of Things (IIoT)
- 2014 **co-chair**, **Algotel**
- 2012 **track chair**, **WPMC** (Wireless Personal Multimedia Communications Symposium), Internet of Things and M2M Communications track

**TPC Member :**

- 2022 IEEE **ICC** (International Conference in Communications), SAC IoT track, [rank B](#)  
 IEEE **ICCCN** (International Conference on Computer Communications and Networks), Cyber Physical Networks & IoT track, [rank A](#)  
 IEEE **WCNC** (Wireless Communications and Networking Conference), [rank B](#)  
 IEEE **PIMRC**, (International Symposium on Personal, Indoor and Mobile Radio Communications), [rank B](#)  
 IEEE **GLOBECOM**, IoT and sensor networks track, [rank B](#)
- 20201 IEEE **ICCCN**, (International Conference on Computer Communications and Networks), Internet of Things track, [rank A](#)  
 IEEE **PIMRC**, (International Symposium on Personal, Indoor and Mobile Radio Communications), [rank B](#)  
 IEEE **GLOBECOM**, IoTSN track, [rank B](#)  
 IEEE **WCNC** (Wireless Communications and Networking Conference), [rank B](#)  
 IEEE **ICC** (International Conference in Communications), SAC IoT track, [rank B](#)  
 IEEE/IFIP **Manage-IoT** (part of IM'2021), International Workshop on Internet of Things Management
- 20200 IEEE **PIMRC**, (International Symposium on Personal, Indoor and Mobile Radio Communications), [rank B](#)  
 IEEE **GLOBECOM**, IoTSN track, [rank B](#)  
 IEEE **ICC** (International Conference in Communications), SAC IoT track, [rank B](#)  
 IEEE **ISCC**, (International Symposium on Computers and Communications), [rank B](#)  
**ADHOCNOW**, International Conference on Ad Hoc Networks and Wireless, [rank B](#)  
**Algotel**, Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications
- 2019 IEEE **ICC** (International Conference in Communications), SAC IoT track, [rank B](#)  
 IEEE **WCNC** (Wireless Communications and Networking Conference), [rank B](#)  
 IEEE **PIMRC**, (International Symposium on Personal, Indoor and Mobile Radio Communications), MAC and Cross-Layer Design track, [rank B](#)  
 IEEE **GLOBECOM**, Selected Areas in Communication track, [rank B](#)  
 IEEE **ISCC**, (International Symposium on Computers and Communications), [rank B](#)  
**ADHOCNOW**, International Conference on Ad Hoc Networks and Wireless, [rank B](#)  
 IEEE WF-5G (World Forum on Internet of Things)  
 IEEE WF-IoT (World Forum on Internet of Things)  
 IEEE **WWIC** (International Conference on Wired/Wireless Internet Communications)



- 2018 IEEE **ICC** (International Conference in Communications), Internet of Things track, [rank B](#)  
 IEEE **VTC-Spring** (Vehicular Technology Conference), Future Trends and Emerging Technologies track, [rank B](#)  
 IEEE **PIMRC**, (International Symposium on Personal, Indoor and Mobile Radio Communications), MAC and Cross-Layer Design track, [rank B](#)  
 IEEE **GLOBECOM**, Selected Areas in Communication track, [rank B](#)  
 IEEE **ISCC**, (International Symposium on Computers and Communications), [rank B](#)  
**ADHOCNOW**, International Conference on Ad Hoc Networks and Wireless, [rank B](#)  
 IEEE WF-5G (World Forum on Internet of Things)  
**WISARN**, International Workshop on Wireless Sensor, Actuator and Robot Networks, INFOCOM'18 workshop,
- 2017 IEEE **ICC** (International Conference in Communications), Selected Areas in Communications Symposium : Internet of Things, [rank B](#)  
 IEEE **VTC-Spring** (Vehicular Technology Conference), Wireless Access Technology and Heterogeneous Networks track, [rank B](#)  
 IEEE **VTC-Fall** (Vehicular Technology Conference), Vehicular Communications, Networks, and Telematics track, [rank B](#)  
 IEEE **PIMRC**, (International Symposium on Personal, Indoor and Mobile Radio Communications), MAC and Cross-Layer Design track, [rank B](#)  
 IEEE **ISCC**, (Symposium on Computers and Communications), [rank B](#)  
 IEEE **GLOBECOM**, Selected Areas in Communication track, [rank B](#)  
 IEEE **Wireless Days**  
**WISARN**, International Workshop on Wireless Sensor, Actuator and Robot Networks
- 2016 IEEE **ICC** (International Conference in Communications), Selected Areas in Communications Symposium : Internet of Things, [rank B](#)  
 IEEE **VTC-Spring** (Vehicular Technology Conference), LTE/LTE-A, 5G, and Wireless Heterogeneous Networks track, [rank B](#)  
 IEEE **VTC-Fall** (Vehicular Technology Conference), Vehicular Communications, Networks, and Telematics track, [rank B](#)  
 IEEE **PIMRC**, (International Symposium on Personal, Indoor and Mobile Radio Communications), MAC and Cross-Layer Design track, [rank B](#)  
 IEEE **IWCMC**, (International Wireless Communications and Mobile Computing Conference), Wireless Sensor Symposium  
 IEEE **Wimob** (International Conference on Wireless and Mobile Computing, Networking and Communications)  
 IEEE **Wireless Days**, 5G track  
**WISARN**, International Workshop on Wireless Sensor, Actuator and Robot Networks
- 2015 IEEE **ICC** (International Conference in Communications), Selected Areas in Communications Symposium : Internet of Things, & Communications for the Smart Grid & Mobile and Wireless Networking Symposium tracks , [rank B](#)  
 IEEE **PIMRC**, (International Symposium on Personal, Indoor and Mobile Radio Communications), MAC and Cross-Layer Design track, [rank B](#)  
 IEEE **VTC-Fall**, (Vehicular Technology Conference), Cellular Networks Track, [rank B](#)  
 IEEE/IFIP **NTMS**, (International Wireless Communications and Mobile Computing Conference), Mobility & Wireless Networks Track  
 ACM **IoT-Sys**, in conjunction with ACM MobiSys 2015  
**Algotel**  
 IEEE **IWCMC**, (International Wireless Communications and Mobile Computing Conference), Wireless Sensor Symposium  
**Adhocnets**, (International Conference on Ad Hoc Networks)

- 2014 IEEE **ICC** (International Conference in Communications), Selected Areas in Communications Symposium , [rank B](#)  
 IEEE **Globecom**, (Global Communication Conference) Selected Areas in Communications Symposium (IoT), [rank B](#)  
 IEEE/ACM **IWCMC** (International Wireless Communications and Mobile Computing Conference), Wireless Sensor Networks Symposium track, [rank B](#)  
 IEEE/IFIP **NTMS** (International Conference on New Technologies, Mobility and Security), Mobility track  
 IEEE **WIMOB** (International Conference on Wireless and Mobile Computing, Networking and Communications)  
**WPMC**, International Symposium on Wireless Personal Multimedia Communication  
**WISARN**, International Workshop on Wireless Sensor, Actuator and Robot Networks
- 2013 IEEE **VTC-Spring** (Vehicular Technology Conference), Ad-Hoc and Sensor Networks track, [rank B](#)  
 IEEE **PIMRC** (International Symposium on Personal, Indoor and Mobile Radio Communications), Cross Layer & Mobile Wireless Networks tracks , [rank B](#)  
 IEEE **VTC-Spring** (Vehicular Technology Conference), Ad-hoc, Mesh, Machine-to-Machine, and Sensor Networks track, [rank B](#)  
 IEEE **WIMOB** (International Conference on Wireless and Mobile Computing, Networking and Communications)  
 IEEE/ACM **IWCMC** (International Wireless Communications and Mobile Computing Conference), WSN track, [rank B](#)  
**Algotel**  
 EAI **ADHOCNETS** (International Conference on Ad Hoc Networks)
- 2012 IEEE **PIMRC** (International Symposium on Personal, Indoor and Mobile Radio Communications), Cross Layer & Mobile Wireless Networks tracks , [rank B](#)  
 IEEE/IFIP **NTMS** (International Conference on New Technologies, Mobility and Security), Mobility track  
 IEEE **WIMOB** (International Conference on Wireless and Mobile Computing, Networking and Communications)  
 EAI **ADHOCNETS** (International Conference on Ad Hoc Networks)
- 2011 IEEE **PIMRC** (International Symposium on Personal, Indoor and Mobile Radio Communications), Cross Layer & Mobile Wireless Networks tracks , [rank B](#)  
 IEEE/IFIP **NTMS** (International Conference on New Technologies, Mobility and Security), Mobility track  
 IEEE/ACM **IWCMC** (International Wireless Communications and Mobile Computing Conference), WSN track, [rank B](#)  
 IEEE **VTC-Spring** (Vehicular Technology Conference), Ad-Hoc and Sensor Networks track, [rank B](#)  
 IEEE **WIMOB** (International Conference on Wireless and Mobile Computing, Networking and Communications)
- 2010 ACM **Mobility** (Conference on Mobile Technology, Applications and Systems)  
 IEEE/ACM **IWCMC** (International Wireless Communications and Mobile Computing Conference), WSN track, [rank B](#)  
 IEEE **AINA** International Conference on Advanced Information Networking and Applications, [rank B](#)  
 IEEE **WIMOB** (International Conference on Wireless and Mobile Computing, Networking and Communications), [rank B](#)  
**Algotel** (Aspects Algorithmiques des Télécommunications)
- 2009 IEEE **IWCLD** (International Workshop on Cross-layer Design)  
 ACM **Mobility** (Conference on Mobile Technology, Applications and Systems)  
 IEEE/ACM **IWCMC** (International Wireless Communications and Mobile Computing Conference), WSN track  
 IEEE **WIMOB** (International Conference on Wireless and Mobile Computing, Networking and Communications), [rank B](#)

2008	IEEE <b>PIMRC</b> (International Symposium on Personal, Indoor and Mobile Radio Communications), Cross Layer & Mobile Wireless Networks tracks IEEE/ACM <b>IWCMC</b> (International Wireless Communications and Mobile Computing Conference) WSN track, <b>rank B</b> IEEE <b>WIMOB</b> (International Conference on Wireless and Mobile Computing, Networking and Communications)
2007	IEEE/ACM <b>IWCMC</b> (International Wireless Communications and Mobile Computing Conference) WSN track, <b>rank B</b>
2006	IEEE <b>IWWAN</b> (International Workshop on Wireless Ad-hoc & Sensor Networks)

### Organizing Committee :

2008	<b>CFIP</b> (Colloque Francophone sur l'Ingénierie des Protocoles) : site web, publication des actes dans HAL, recherche de parrains académiques et industriels, etc.
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### Project Implication : <sup>1</sup>

Project	Period	Topics & Responsibility
Region Grand Est <b>Englab</b>	2023-2025	Cybersecurity and AI for networking <b>210k€</b>
<b>PHC Iran</b>	2020-2023	PI, <b>5k€</b> for visits in Iran
ANR nanonet	2018-2021	Privacy aware Named Data Networking, member, WP leader, <b>200k€</b>
<b>CIFRE T&amp;S</b>	2017-2019	Technology & Strategy – Smart and Responsible Multimodal Mobility in Complex Urban Environments, CIFRE grant, <b>PhD thesis + 20k€</b>
<b>T&amp;S</b>	2016	Industrial Grant from Technology & Strategy, Journey Planning in Smart Cities, <b>10k€</b>
<b>SEMNET</b>	2016	Formal Models for the Industrial Internet of Things, Univ. Strasbourg, <b>12k€</b>
<b>SAMPO</b>	2015	Research Visit organized by the French Embassy (Nokia Research, VTT Helsinki et Oulu, Univ. Tampere, Univ. Aalto, Univ. Helsinki, Univ. Oulu, <b>1.5k€</b>
IDEX <b>DIAG@IoT</b>	2015	Datamining and Machine Learning for WSN, <b>10k€</b>
ANR <b>IRIS</b>	2011-2014	ANR INFRA - All IP Wireless Sensor Networks (with Thalès (leader), ST MicroElectronics, Sen.Se, LIG, LIP6, ICube), <b>150k€</b> for ICube
NSFC / CNRS <b>DREAM</b>	2013	Body Area Networks, with Prof. Jialiang Lu (Shanghai Jiaotong Univ., China), <b>3.2k€</b>
PHC <b>DCNSO</b>	STAR 2012-2013	Delay Constrained Wireless Sensor Networks, with Prof. Won-Joo Hwang (Inje Univ. Gimhae, Korea), <b>8k€</b>
<b>EXPRIMA</b>	2010	PI, Testbed for Wireless Mesh Networks, Univ. Strasbourg, <b>10k€</b>
FUI <b>Senscity</b>	2009-2011	co-PI with B. Ponsard (212k€) Sensor Networks for Urban Environments, Minalogic project (with Orange Labs, Coronis, HP, PME, Gscope, LIG) <b>212k€</b>

1. Projects where I am a co-PI are specified in bold and underlined

ARC <b>CARMA</b>	2007-08	<b>local coordinator</b> , ARC on the capacity of wireless mesh networks (INRIA Nice, Lyon, Lille / LIG)
RNRT ARESA	2006-09	member, embedded computing and sensor networks
RNRT AIRNET	2006-09	member, mobility and interoperability in a all wireless network
IST WIP	2006-08	member, an all-IP wireless mesh network
ARC IRAMUS	2004-06	member, radio / MAC layers interface
ACI FRAGILE	2003-06	member, security and resilience
CNRS RECAP	2005-06	member, mesh platform (deployment and experiments)

## Supervision <sup>2</sup>

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### Ph.D. Students :

#### On-going :

F. Veisi-Gohstab Industrial Wireless Networks (Oct 2020 - \*) (60%) with Julien Montavont (40%)

#### Defended :

R. J. Neto Nano-Autonomous Networks for Privacy Preservation in the IoT (March 2019 - July 2022) (50%) with Pascal Merindol (50%)

M. A. Falek Responsive Multimodal Mobility in Smart Cities (jan 2017 - Dec 2020) (50%) with Antoine Gallais (20%) and C. Pelsser(30%)  
now **Engineer** at Criteo, Paris, France

V. Kotsiou High-reliability with 6TiSCH (March 2016 - Oct. 2020) (50%) with Georgios Z. Papadopoulos (IMT Atlantique) (50%)  
now **Teacher** in computer science, Edessa, Greece

R. Teles Hermeto Virtualizing Heterogeneous Wireless Networks with SDN for the 5G (oct 2016 - Nov 2019)  
now **Engineer** at CapGemini

S. Ben Yaala Link Layer Standards for the Internet of Things (sept 2015 - July 2018) (50%)  
now **assistant prof.** (without tenure) at SupCom'Tunis

G. Gaillard SLA for urban WSN (Dec. 2012 - Dec. 2016) (20%)  
with Fabrice Valois (INSA de Lyon) (40%) and Dominique Barthel (Orange Labs) (40%)  
now **postdoc** @ IRIT (Toulouse)

O. Iova Routing in Low Power Lossy Networks (2011 - Dec. 2014) (80%)  
now **Associate Prof.** @ INSA Lyon

N. Abdeddaim Performance Analysis of a IEEE 802.15.4 network (209 - Oct. 2012) (80%)  
now **Research engineer** @ PSA (connected vehicle)

C. T. de Oliveira Wireless Mesh Networks (2009 - Oct. 2012) (80%)  
now **Professor** at IFCE (Brazil)

B. Pavkovic Urban Wireless Sensor Networks (2009 - Dec. 2012) (80%)  
now permanent **researcher** at RT-RK (Serbia) on smart buildings

#### Master students :

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2. percentage of supervision correspond to my own estimation since we don't have any 'official' percentage of implication

E. Mozaffari	co-supervised with Prof. M. Nassiri (Bu-Ali Sina University, Iran) Multipath aware scheduling for high reliability and fault tolerance in low power industrial networks. Publication : Journal of Network and Computer Applications (JNCA)
G. Heidsieck	Temporal Datamining for the supervision and Fault Detection in the Industrial Internet of Things (2017)
K. Brun Laguna	Multipath and Network Lifetime in a 6TiSCH stack (2015)
M. Amine	datamining for the IoT with 6TiSCH (6 months, 2015)
M. Sabzevari	Bursty traffic in RPL / IEEE 802.15.4e networks (2013) co-supervision with Mohammad Nassiri (Bu-Ali Sina University, Iran)
F. Gargouri	Data processing in WSN (2009)
D. Abdelali	Channel allocation and activity measurement in spontaneous mesh networks (2009)
R. Tout	Mobility Models Characterization for Mobile Ad Hoc Networks (2005)