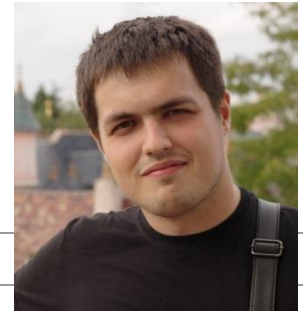


# Evgeny Khorov, Ph.D.

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## COMMON INFORMATION

Researcher and consultant in the area of wireless networks.

Areas of interest: Internet of things, 5G networks, dense deployment, MTC, future Wi-Fi, routing, multiple channel access, multimedia streaming, QoS, mathematical modeling.

Over 80 scientific publications.

Russian Government Prize in Science and Technology for Young Scientists (2016), Scopus Award Russia (2018), Moscow Government Prize for young scientists (2013), Best Paper Awards.

Contributor and Voting Member of IEEE 802.11 (develops next generation Wi-Fi).

Editor of "Ad hoc Networks", Reviewer for many international journals.

TPC Chair of Globecom'18 WS on CA5GS, IEEE BlackSeaCom'19. Executive Chair of WiFlex 2013, Information technologies and systems (ITaS) Conference & School 2014, 2015 and 2016.

Keynote/Tutorial/Panel speaker at a number of international scientific conferences, incl.: IEEE PIMRC 2019 (Turkey), NEW2AN 2018 (Russia), IEEE PIRMC 2017(Canada), IEEE BlackSeaCom 2017 (Turkey), IEEE Globecom 2017 (Singapore), IEEE ICC 2016 (Malaysia), IEEE ISWCS 2014 (Spain).

Experience in applying and leading research grants and industry projects. Leader of projects funded by Russian Science Foundation, Russian Foundation for Basic Research, Ministry of Education and Science, British Council, Huawei, Quantenna Communications, etc.

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## WORK EXPERIENCE

### **Acting Head of Wireless Networks Lab (early positions: Junior Researcher, Researcher, Senior Researcher)**

2008 – present time

*Institute for Information Transmission Problems (Kharkevich Institute),*

*Russian Academy of Sciences, <http://iitp.ru/>*

Has developed new algorithms, mathematical and simulation models of various networking protocols for wireless networks (both cellular and WLANs), found drawbacks and improved their efficiency (Russian Government Prize in Science and Technology for Young Scientists, 2016; Scopus Award Russia, 2018).

Has developed pioneering approaches to model IEEE 802.11ah aka Wi-Fi HaLow (for IoT). For the paper on 802.11ah, received Best Review Paper Award from Elsevier Computer Communications.

Has proposed and studied with the first-ever NOMA Wi-Fi system. Has initiated discussion on real-time applications in Wi-Fi networks in IEEE 802.11 Working Group.

Proposed and designed the xStream platform for cross-layer cooperation which manifold increases the number of users with high QoE in a cellular network.

Has designed pioneering methods to improve QoE in cellular networks.

Has received Best Cooperation Project awards from industrial partners in 2015, 2017, and 2018.

Has introduced and studied a new type of queuing systems to model multimedia streaming via periodic reservations (Moscow Government Prize for young scientists).

Has developed a theory of link management in multihop ad hoc networks (Best Paper Award).

Together with Prof. Ian F. Akyildiz prepared a project proposal and won a Megagrant.

Being an Executive Co-chair of ITaS 2015, he has extended program committee and increased the conference audience and the number of talks (both keynotes and regular) by 50...100%.

Has successfully lead academic and industrial projects of total budget USD 4M.

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**Head of Telecommunication Systems Lab** 2017 – present time  
*Higher School of Economics. <http://hse.ru/>*  
Has established a lab, designed a research program, and prepared project proposals, one of which won a grant from RSF.

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**Deputy Head of Department & Associate Professor (early position: Assistant Professor)** 2012 – present time  
*Moscow Institute of Physics and Technology. <http://mipt.ru/>*  
Has significantly improved curriculum in *telecommunications*. Developed novel courses. Lectures on 4 courses, supervises BS and MS students. Supervises 4 PhD students. A PhD student won Moscow Prize for Young Scientists, 2018  
Some students won prizes at the Student Olympiad “Infotelecom”.

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**Associate Professor** 2017 – present time  
*Moscow State University. <http://msu.ru/>*  
Lectures on *Mathematical fundamentals of wireless networks protocols*

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**Deputy Head of Lab (early position: Senior Research Scientist)** 2016 – 2017  
*Skolkovo Institute of Science and Technology <http://skoltech.ru/>*  
*Center for Computational and Data-Intensive Science and Engineering*  
Has designed an MS educational program on the Internet of Things and new courses.

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**Visiting Research Fellow** July 2015 – October 2015  
*King's College London, Department of Mathematics and Natural Science. <http://www.kcl.ac.uk/>*  
Has developed a method for performance evaluation of Wi-Fi networks in IoT scenarios.

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**Developer, Team Leader** 2007 – 2008  
*NetCracker*  
Has created 2 modules for NetCracker OSS. Has implemented Netcracker OSS in MTS, Sprint.

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**Tutor** 2007 – 2008  
*Moscow Institute of Physics and Technology*  
*Kalashnikov Centre for Research and Innovation in Telecommunication*  
Has lectured on *Java Advance*. Was responsible for preparing learning material for courses and devising relevant practical activities.

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## EDUCATION

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**PhD Student** 2010 – 2012  
*Moscow Institute of Physics and Technology & Institute for Information Transmission Problems*  
Doctor of Philosophy. Thesis: *Performance evaluation of data transmission methods, which meet QoS requirements in wireless ad hoc networks*. Early defense at the second year.  
Specialization: *Telecommunication Systems and Network*.

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**Master Student** 2008 – 2010  
*Moscow Institute of Physics and Technology*  
MS in Applied Physics and Mathematics. Graduated with honors. GPA 5.00 out of 5.00.  
Thesis: *Multiple metrics usage in mesh networking*.

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**Bachelor Student** 2004 – 2008  
*Moscow Institute of Physics and Technology*  
BS in Applied Physics and Mathematics. Graduated with honors. GPA 4.93 out of 5.00.  
Thesis: *Channel Switch Time Distribution in ECMA-368 Networks*.

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## INVITED TALKS, KEYNOTES & TUTORIALS

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- T1. Evgeny Khorov. Wi-Fi in the 2020s (Tutorial), IEEE PIMRC, Istanbul, 2019,
- T2. Evgeny Khorov Communication between Applications and Networks for QoE-aware Slicing in 5G Systems (Keynote). NEW2AN, Saint-Petersburg, 2018.
- T3. Evgeny Khorov Can 5G kill Wi-Fi? (Invited Talk). 5G Summit, Thessaloniki, Greece, 2018
- T4. Evgeny Khorov xStream: a new platform for Application-aware Adaptive Network Slicing in 5G Systems (Tutorial). IEEE Global Information Infrastructure and Networking Symposium (GIIS 2018), Thessaloniki, Greece, 2018
- T5. Evgeny Khorov Wi-Fi in the world of 5G. (Invited Talk) NI Summit, Moscow
- T6. xStream: a novel protocol for cross-layer cooperation (Invited Talk), Shanghai, 2018
- T7. Latest advances of Low Power Wide Area networking technologies towards IoT (Panel at IEEE Globecom). Singapore, 2017.
- T8. Future Wi-fi (Tutorial). IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, Montreal, Canada, 2017
- T9. Wi-Fi for 5G: Faster and Smarter (Tutorial). IEEE BlackSeaCom, Istanbul, Turkey, 2017
- T10. xStream: Communication between the Application and the Network, ICT Algorithm Design, 2017
- T11. IEEE 802.11 in a 5G Landscape. Industrial panel at IEEE International Conference on Communications 2016. Kuala Lumpur, Malaysia, 2016.
- T12. Can we meet 5G requirements with the current protocol stack? ICT Algorithm Design, 2015
- T13. Low Power Wi-Fi – How IEEE 802.11ah is transforming M2M (Tutorial, 2h). IEEE International Symposium on Wireless Communication Systems, Barcelona, Spain, August 2014.
- T14. IEEE 802.11ah, an Enabling Technology for the Internet of Things. How Does it Work? (Tutorial, 3.5h). IEEE International Conference on Advances in Computing, Communications and Informatics. Delhi, India, September 2014.
- T15. Are you ready for the ICT revolution? (Keynote) The LVI Conference of Moscow Institute of Physics and Technology, Dolgoprudny, Russia, November 2013.

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## MAIN PAPERS

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### Proceedings

P1. G. Bianchi, A. Lyakhov, **E. Khorov** (Eds.) Wireless Access Flexibility. First International Workshop, WiFlex 2013, Kaliningrad, Russia, September 4-6, 2013, Proceedings. Series: Lecture Notes in Computer Science, Vol. 8072. Subseries: Computer Communication Networks and Telecommunications. 1st Edition, 2013, XII, 159 p.

### Journals and Book Series

- J1. **E. Khorov**, Anton Kiryanov, Andrey Lyakhov, Evgeny Khorov. A Tutorial on IEEE 802.11ax High Efficiency WLANs. IEEE Communications Surveys and Tutorials Q1, 2019, DOI:10.1109/COMST.2018.2871099
- J2. D. Bankov, **E. Khorov**, A. Lyakhov, and M. Sandal. Enabling Real-Time Applications in Wi-Fi Networks. International Journal of Distributed Sensor Networks, May 2019
- J3. Serena Santi, Le Tian, **Evgeny Khorov**, Jeroen Famaey. Accurate Energy Modeling and Characterization of IEEE 802.11ah RAW and TWT, *Sensors* **2019**, 19(11), 2614
- J4. I.F. Akyildiz, A. Kak, **E. Khorov**, A. Krasilov, A. Kureev. ARBAT: A Flexible Network Architecture for QoE-aware Communications in 5G Systems. *Computer Networks*, 2018
- J5. Bankov, D.; **Khorov, E.**; Lyakhov, A.; Stepanova, E.; Tian, L.; Famaey, J. What Is the Fastest Way to Connect Stations to a Wi-Fi HaLow Network? *Sensors* **2018**, 18, 2744.
- J6. V.A. Loginov, A.I. Lyakhov, **E.M. Khorov**, Coexistence of Wi-Fi and LTE-LAA Networks: Open Issues // *Journal of Communications Technology and Electronics*, 2018, Vol. 63, No. 12, pp. 1530–1537.

- J7. A.A. Belogaev, A.N. Krasilov, A.I. Lyakhov, **E.M. Khorov**, Analysis of the Differential Update Method for Control Information Dissemination in Wireless Networks // Journal of Communications Technology and Electronics, 2018, Vol. 63, No. 12, pp. 1538–1544.
- J8. **Evgeny Khorov**, Artem Krasilov, Alexander Krotov, Andrey Lyakhov, Will MCCA revive wireless multihop networks? Computer Communications. Volume 104, May 2017, Pages 159–174.
- J9. Tian, L.; **Khorov, E.**; Latré, S.; Famaey, J. Real-Time Station Grouping under Dynamic Traffic for IEEE 802.11ah. Sensors 2017, 17, 1559
- J10. A.G. Kiryanov, A.I. Lyakhov, **E.M. Khorov**. Analysis of Algorithms for Decentralized Dynamic Channel Resource Reservation for Data Streaming in Wi-Fi Networks. Journal of Communications Technology and Electronics, 2017, Vol. 62, No. 6, pp. 694–700
- J11. A.S. Ivanov, A.I. Lyakhov, **E.M. Khorov**. A mathematical model of transmitting a non-ordinary flow with periodic reservations and block acknowledgements in a channel with correlated noise, Automation and Remote Control, Volume 78, Issue 11, Pages 1978-1990, 2017.
- J12. **Evgeny Khorov**, Anton Kiryanov, Alexander Krotov, Pierluigi Gallo, Domenico Garlisi, Ilenia Tinnirello. Joint Usage of Dynamic Sensitivity Control and Time Division Multiple Access in Dense 802.11ax Networks. // Lecture Notes in Computer Science, Vol. 10121, pp. 57 –71. Springer, Nov 2016.
- J13. Alexander Ivanov, **Evgeny Khorov**, Andrey Lyakhov, Ilya Solomatin. Mathematical Model of QoS-aware Streaming with Heterogeneous Channel Access in Wi-Fi Networks // Lecture Notes in Computer Science, 9870, Springer, Sep. 2016.
- J14. Dmitry Bankov, **Evgeny Khorov**, Alexey Kureev, Andrey Lyakhov. Improving Efficiency of Heterogeneous Wi-Fi Networks with Energy-Limited Devices// Lecture Notes in Computer Science, 9870, Springer, Sep. 2016.
- J15. **Evgeny Khorov**, Andrey Lyakhov, Alexander Krotov, Andrey Guschin. A survey on IEEE 802.11ah: an Enabling Networking Technology for Smart Cities. //Computer Communications, Volume 58, March 2015, pp. 53–69, 2015.
- J16. **E.M. Khorov**. Choosing the channel reservation period in self-organizing wireless networks. //Journal of Communications Technology and Electronics, 2015, Vol. 60, No. 12, pp. 1372-1378.
- J17. A.G. Kiryanov, A.A. Kureev, A.I. Lyakhov, **E.M. Khorov**. Analysis of Logical Topology Construction Mechanisms in MANET. //Journal of Communications Technology and Electronics, 2015, Vol. 60, No. 12, pp. 1379–1388.
- J18. I. S. Kargin, **E. M. Khorov**, A. I. Lyakhov. A mathematical method for packet loss ratio estimation for a multipath route in the presence of correlated errors. //Problems of Information Transmission. July 2015, Volume 51, Issue 3, pp. 299-305.
- J19. A.G. Kiryanov, V.A. Loginov, A.I. Lyakhov, **E.M. Khorov**. Analytical Model of a P-Persistent Method of Queue Management for Multimedia Streaming over Wireless Networks. //Journal of Communications Technology and Electronics, 2015, Vol. 60, No. 12, pp. 1389–1402.
- J20. Ivanov A.S. Lyakhov A.I. and **Khorov E.M.** Analytical Model of Batch Flow Multihop Transmission in Wireless Networks with Channel Reservations. //Automation and Remote Control. July 2015, Volume 76, Issue 7, pp. 1179-1192.
- J21. A. G. Kiryanov, A. I. Lyakhov, and **E. M. Khorov**, Modeling of RealTime Multimedia Streaming with Deterministic Access. //Journal of Communications Technology and Electronics, 2014, Vol. 59, No. 12, pp. 1501–1511.
- J22. **E. Khorov**, A. Krasilov, A. Lyakhov, D. Ostrovsky. Dynamic Resource Allocation for MCCA-Based Streaming in Wi-Fi Mesh Networks. //Lecture Notes in Computer Science, 2013, v. 8072, pp. 94-113.
- J23. A. Guschin, **E. Khorov**, A. Kiryanov, A. Lyakhov, A. Safonov. P-persistent Queue Management to Overcome Channel Failures in IEEE 802.11 Networks for Real-time Multimedia Streaming. //Lecture Notes in Computer Science, 2013, v. 8072, pp. 70-80.

- J24. A. Krasilov, A. Lyakhov, D. Ostrovsky, and **E. Khorov**. A Dynamic Channel Reservation Method for Multimedia Streaming in Wi-Fi Mesh Networks. //Automation and Remote Control, Volume 73, Issue 5, pp. 797-809, 2012.
- J25. Kiryanov, A. G.; Lyakhov, A. I.; Safonov, A. A., **Khorov E.M.** A method to estimate efficiency of the connection control mechanisms in wireless self-organizing networks. //Automation and Remote Control, 2012, vol. 73, no. 5. P. 797–809.
- J26. Lyakhov, A. I., Ostrovsky, D. M., **Khorov E.M.** Analytical study of the quality of links established by the neighborhood discovery protocol. //Journal of Communications Technology and Electronics, 2012, Vol. 57, no 12. pp. 1314-1321.
- J27. Lyakhov, A. I.; Nekrasov, P. O.; Ostrovsky, D. M.; Safonov, A. A., **Khorov E.M.** Analysis of the joint use of the proactive and reactive methods of the topology information dissemination in ad-hoc wireless networks. //Journal of Communications Technology and Electronics, 2012, vol. 57, no 12, pp. 1322–1330.
- J28. Kiryanov, A. G.; Lyakhov, A. I.; Nekrasov, P. O.; Platov D.A., Safonov, A. A., **Khorov E.M.** et al. Proximity-based Groupcast in MANET (GiM). //Journal of Communications Technology and Electronics, 2012, vol. 57, no 12, pp.1303–1313.
- J29. Shvets E., Lyakhov A., Safonov A., **Khorov E.** Analytical model of IEEE 802.11s MCCA based streaming in the presence of noise. //ACM SIGMETRICS Performance Evaluation Review. 2011. V. 39. No. 2. P. 38-40.
- J30. **Khorov Evgeny**, Safonov Alexander. Multiple metrics in MANET with end - to - end QoS support for unicast and multicast traffic. //Lecture Notes in Computer Science, Vol. 6235, p. 251-262, Springer, 2010.

## Conferences

- C1. P. Kutsevol, V. Loginov, **E. Khorov**, A. Lyakhov. Analytical Study of License-Assisted Access in 5G Networks. // In proc. of IFIP Networking 2019, Warsaw, Poland, 20-22 May, 2019
- C2. K. Ragimova, V. Loginov, **E. Khorov**. Analysis of YouTube DASH Traffic. // In proc. of IEEE BlackSeaCom 2019, Sochi, Russia, 3-6 June, 2019
- C3. A. Belogaev, **E. Khorov**, A. Krasilov, D. Shmelkin, and S. Tang. Conservative Link Adaptation for Ultra Reliable Low Latency Communications // In proc. of IEEE BlackSeaCom 2019, Sochi, Russia, 3-6 June, 2019
- C4. **E. Khorov**, A. Kiryanov, A. Krotov. Cloud-based Management of Energy-Efficient Dense IEEE 802.11ax Networks. // In proc. of IEEE BlackSeaCom 2019, Sochi, Russia, 3-6 June, 2019
- C5. **E. Khorov**, A. Krasilov, I. Selnitskiy, M. Tsaritsyn. Analysis of Capacity Bounds for Ultra Reliable Low Latency Communications. // In proc. of BalkanCom 2019, Skopje, North Macedonia, June 10-12, 2019
- C6. D. Bankov, **E. Khorov**, A. Lyakhov, E. Stepanova. IEEE 802.11ba — Extremely Low Power Wi-Fi for Massive Internet of Things — Challenges, Open Issues, Performance Evaluation // In proc. of IEEE BlackSeaCom 2019, Sochi, Russia, 3-6 June, 2019
- C7. P. Kutsevol, V. Loginov, **E. Khorov**, A. Lyakhov. New Collision Detection Method for Fair LTE-LAA and Wi-Fi Coexistence // In proc. of IEEE PIMRC 2019, Istanbul, Turkey, 8-11 September, 2019
- C8. E. Avdotin, D. Bankov, **E. Khorov**, A. Lyakhov. OFDMA Resource Allocation for Real-Time Applications in IEEE 802.11ax Networks // In proc. of IEEE BlackSeaCom 2019, Sochi, Russia, 3-6 June, 2019
- C9. **Evgeny Khorov**, Aleksey Kureev, Ilya Levitsky. NOMA Testbed on Wi-Fi. //In Proc. of 29th IEEE Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Bologna, Italy, 9-12 September 2018

- C10. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov, Mark Sandal. Enabling Low Latency Communications in Wi-Fi Networks. //In Proc. of 29th IEEE Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Bologna, Italy, 9-12 September 2018
- C11. Vyacheslav Loginov, Igor Kargin, **Evgeny Khorov**, Andrey Lyakhov. Study of Fast Multi-hop ALOHA with Instant Forwarding. //In Proc. of 29th IEEE Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Bologna, Italy, 9-12 September 2018.
- C12. I. F. Akyildiz, **E. Khorov**, A. Kiryanov, D. Kovkov, A. Krasilov, M. Liubogoshchev, D. Shmelkin, and S. Tang. xStream: A New Platform Enabling Communication between Applications and the 5G Network// In Proc. of IEEE Globecom - CA5GS, Abu Dhabi, UAE, 2018.
- C13. **E. Khorov**, A. Ivanov, A. Lyakhov, I. F. Akyildiz. Cloud Control to Optimize Real-Time Video Transmission in Dense IEEE 802.11aa/ax Networks. In Proc. of IEEE MASS, 2018 (Invited paper)
- C14. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov, Andrey Didenko. OFDMA Uplink Scheduling in IEEE 802.11ax Networks // In Proc. of IEEE International Conference on Communications, USA, 2018.
- C15. **Evgeny Khorov**, Aleksey Kureev, Ilya Levitsky, Sergei Tutelian. Scheduling for Downlink Non-Orthogonal Multiple Access in Wi-Fi Networks. //In Proc. of Modern Network Technologies, MoNeTec-2018, Moscow, Russia, 25-26 October 2018.
- C16. **Evgeny Khorov**, Artem Krasilov, Alexey Malyshev. Radio Resource and Traffic Management for Ultra-Reliable Low Latency Communications // In proc. of IEEE Wireless Communications and Networking Conference (WCNC 2018), Barcelona, Spain, 2018.
- C17. Alexander Ivanov, **Evgeny Khorov**, Egor Kuznetsov, Andrey Lyakhov. Mathematical Study of QoS-aware Multicast Streaming in Wi-Fi Networks // In proc. of IEEE Wireless Communications and Networking Conference (WCNC 2018), Barcelona, Spain, 2018.
- C18. **Evgeny Khorov**, Andrey Lyakhov, Ruslan Yusupov. Two-Slot Based Model of the IEEE 802.11ah Restricted Access Window with Enabled Transmissions Crossing Slot Boundaries // In proc. of 19th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2018), June 12-15, 2018, Chania, Greece.
- C19. Aleksey Kureev, Ilya Levitsky, **Evgeny Khorov**, Andrey Lyakhov. Testbed to Study the Capture Effect: Can We Rely on This Effect in Modern Wi-Fi Networks // In proc. of IEEE International Black Sea Conference on Communications and Networking, Batumi, Georgia, 2018.
- C20. **E. Khorov**, A. Lyakhov, N. Zhirnov. Analytical Study of Adaptive Video Generation in CCTV over Public Wireless Networks // In proc. of IEEE International Black Sea Conference on Communications and Networking, Batumi, Georgia, 2018
- C21. **Evgeny Khorov**, Anton Kiryanov, Alexander Krotov. Joint Power Control and Time Division to Improve Spectral Efficiency in Dense Wi-Fi Networks // In proc. of IEEE International Black Sea Conference on Communications and Networking, Batumi, Georgia, 2018
- C22. Andrey Belogaev, **Evgeny Khorov**, Artem Krasilov, Andrey Lyakhov. Analytical study of incremental approach for information dissemination in wireless networks // In proc. of IFIP Wireless Days, 2018.
- C23. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov, Ekaterina Stepanova. Clock Drift Impact on Target Wake Time in IEEE 802.11ax/ah Networks. In Proc. of IEEE En&T 2018, Moscow, Russia, 2018.
- C24. Dmitry Bankov, Andrey Didenko, **Evgeny Khorov**, Vyacheslav Loginov, Andrey Lyakhov. IEEE 802.11ax Uplink Scheduler to Minimize Delay: a Classic Problem with New Constraints //In Proc. of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC'17), Montreal, Canada, 2017.
- C25. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov. Mathematical Model of LoRaWAN Channel Access with Capture Effect //In Proc. of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC'17), Montreal, Canada, 2017.

- C26. **Evgeny Khorov**, Artem Krasilov, Mikhail Liubogoshchev, Suwen Tang. SEBRA: SAND-Enabled Bitrate and Resource Allocation algorithm for network-assisted video streaming. //In Proc. of WiMob 2017, Rome, Italy, 2017.
- C27. Dmitry Bankov, Aleksey Kureev, **Evgeny Khorov**, Andrey Lyakhov. Improving Efficiency of Heterogeneous Wi-Fi Networks with Joint Usage of TIM Segmentation and Restricted Access Window //In Proc. of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC'17), Montreal, Canada, 2017.
- C28. **Evgeny Khorov**, Artem Krasilov, Alexey Malyshev. Radio Resource Scheduling for Low-Latency Communications in LTE and beyond. In Proc. of IEEE/ACM International Symposium on Quality of Service, Vilanova i la Geltru, Spain.
- C29. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov. Mathematical Model of LoRaWAN Channel Access. In Proc. of IEEE 18th International Symposium on "A World of Wireless, Mobile and Multimedia Networks" (WoWMoM), Macao, 2017.
- C30. **Evgeny Khorov**, Artem Krasilov, Alexey Malyshev. Reliable Low Latency Communications in LTE Networks. In Proc. of IEEE International Black Sea Conference on Communications and Networking, Istanbul, Turkey, 2017
- C31. **Evgeny Khorov**, Anton Kiryanov, Nikolay Zhirnov. SAND-inspired Cross-layer Approach for CCTV in 5G Networks // International Conference on Engineering and Telecommunication (EnT), Moscow, Russia, November 29-30, 2017.
- C32. **Evgeny Khorov**, Viacheslav Loginov, Andrey Lyakhov. Several EDCA Parameter Sets for Improving Channel Access in IEEE 802.11ax Networks // In Proc. of 2016 ISWCS, IEEE press, Poznan, Poland, September 2016.
- C33. Andrey Belogaev, **Evgeny Khorov**, Artem Krasilov, Andrey Lyakhov. Study of the enhanced algorithm for control information dissemination in Wi-Fi Mesh networks // In Proc. of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'16), Spain, 2016.
- C34. Alexander Ivanov, **Evgeny Khorov**, Egor Kuznetsov, Andrey Lyakhov. Modeling Leader-based Multicast Transmission via Periodic Reservations in Wi-Fi networks // In Proc. of 2016 ISWCS, IEEE press, Poznan, Poland, September 2016.
- C35. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov. The Study of the Distributed Control Method to Hasten Link Set-up in IEEE 802.11ah Networks. // In Proc. of XV International Symposium "Problems of Redundancy in Information and Control Systems", St. Petersburg, September 2016.
- C36. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov, Sigurd Schelstraete. Beacons in Dense Wi-Fi Networks: How to Befriend with Neighbors in the 5G World? // In Proc. of IEEE WoWMoM, Portugal, June 2016.
- C37. **Evgeny Khorov**, Anton Kiryanov, Andrey Lyakhov. QoS-aware Streaming With HCCA TXOP Negotiation in Overlapped Wi-Fi Networks //In proc. of IFIP Wireless Days - 2016, Toulouse, France, 2016.
- C38. **Evgeny Khorov**, Viacheslav Loginov, Andrey Lyakhov. On Throughput Estimation with TXOP Sharing in IEEE 802.11ah Networks //In proc. of IEEE BlackSeaCom - 2016, Varna, Bulgaria, June 2016.
- C39. **Evgeny Khorov**, Anton Kiryanov, Andrey Lyakhov. Analysis of Multiplexed Streaming via Periodic Reservations of Wireless Channel // In proc. of IEEE BlackSeaCom - 2016, Varna, Bulgaria, June 2016.
- C40. Alexander Ivanov, **Evgeny Khorov**, Andrey Lyakhov, Ilya Solomatin. Modeling Joint Usage of Random and Deterministic Channel Access in Wi-Fi Networks //In proc. of Wireless Communications and Mobile Computing 2016, Cyprus, 2016

- C41. Alexander Ivanov, **Evgeny Khorov**, Egor Kuznetsov, Andrey Lyakhov. Mathematical Model of QoS-aware Multicast Transmission via Periodic Reservations // In proc. of IEEE Wireless Communications and Networking Conference (WCNC 2016), Doha, Qatar, 2016
- C42. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov. On the Limits of LoRaWAN Channel Access. // In Proc. of IEEE En&T 2016, Moscow, Russia, 2016.
- C43. Alexander Ivanov, **Evgeny Khorov**, Andrey Lyakhov. Analytical Model of QoS-aware Streaming in Wi-Fi Networks via Periodic TXOPs. //In Proc. IEEE Globecom 2015 - ETFWLALN. San Diego, USA, December 2015.
- C44. **Evgeny Khorov**, Alexander Ivanov, Andrey Lyakhov, Vitaly Zankin. Modelling Channel Access in Millimetre Wave Wi-Fi. //In Proc. International Symposium on Wireless Communication Systems (ISWCS). Brussels, Belgium. August 2015.
- C45. Andrey Belogaev, **Evgeny Khorov**, Artem Krasilov, Andrey Lyakhov. Study of the group-based approach to disseminate control information in wireless network. //In Proc. International Symposium on Wireless Communication Systems (ISWCS). Brussels, Belgium. 2015.
- C46. **Evgeny Khorov**, Alexander Krotov, Andrey Lyakhov. Modelling Machine Type Communication in IEEE 802.11ah networks. //In Proc. of IEEE International Conference on Communications - Workshop on 5G & Beyond - Enabling Technologies and Applications. London, UK, June 2015.
- C47. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov. Is it Worth to Predict Overflows during Video Streaming over Wireless Networks? //In Proc. of IEEE BlackSeaCom. Constanta, Romania, May 2015.
- C48. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov. The Study of the Centralized Control Method to Hasten Link Set-up in IEEE 802.11ah Networks. //In Proc. of European Wireless 2015, Budapest, Hungary. May 2015.
- C49. Igor Kargin, **Evgeny Khorov**, Andrey Lyakhov. On PLR Estimation for a Multipath Route with Failure Correlation. //In Proc. of European Wireless 2015, Budapest, Hungary. May 2015.
- C50. **Evgeny Khorov**, Alexander Ivanov, Andrey Lyakhov. QoS Support for Bursty Traffic in Noisy Channel via Periodic Reservations. //In proc. of IFIP Wireless Days – 2014. Rio-de-Janeiro, Brazil. November 2014.
- C51. Dmitry Bankov, **Evgeny Khorov**, Andrey Lyakhov. Fast Quality Assessment of Videos Transmitted over Lossy Networks. //In Proc. of IEEE En&T 2014, Moscow, Russia, 2014.
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