

OSIPOV DMITRY PhD

E-mail: d_osipov@iitp.ru, dosipov@hse.ru
Date of birth: 30.01. 1981.
Place of birth: Moscow

Education:

Candidate of Engineering sciences; specialty 05.13.17 “Foundations of information science” (“Multiple access with concatenated coding”, 2008)

Master of Business Administration (MBA) (specialty — financial management) — Interbranch Competence Enhancement Institute affiliated to the Bauman Moscow State Technical University (2003 Best Graduate.)

Manager — Interbranch Competence Enhancement Institute affiliated to the Bauman Moscow State Technical University (2002).

Engineer — specialty “Airborne vehicles control systems” (area of expertise - Engineering processes control) — Bauman Moscow State Technical University (2003).

From 2010 to the present moment

Senior Research Fellow of the Institute for Information Transmission Problems RAS (Kharkevitch Institute)

2008-2010.

Research Fellow of the Institute for Information Transmission Problems RAS (Kharkevitch Institute)

2003-2008.

Junior Research Fellow of the Institute for Information Transmission Problems RAS (Kharkevitch Institute)

1997 – 2003.

student of Chair “Automated Control Systems” “Computer science and control systems” faculty at the **Bauman Moscow State Technical University.**

1995 — 1997.

Specialized Research and Training Center affiliated to the Bauman Moscow State Technical University (physico-mathematical college № 1580)

1987 — 1995.

Secondary school № 1101 Moscow

Educational activities:

Present moment

Deputy Head of the Department "Technologies of complex systems modeling"

Faculty of Computer Science, National Research University Higher School of Economics

From 2012 to the Present moment

Assistant professor

Department "Technologies of complex systems modeling" Faculty of Computer Science
National Research University Higher School of Economics

Courses delivered:

Mathematical foundations of modern telecommunications (A. P. Kuleshov, D. S. Osipov)
Modern telecommunication models (D. S. Osipov)

Lecturer of the Moscow Institute of Physics and Technology State University
Faculty of Radio Engineering and Cybernetics
The Department for Information Transmission and Processing Problems

Course

Wireless networks: physical layer techniques fundamentals (A. P. Kuleshov, D. S. Osipov)

Guest lecturer of the summer school "Society informatization" June 18-30, 2012 Astana, Kazakhstan
Course

Modern Wireless Communications

R&D activities

Huawei R&D Moscow center

scientific consultant
2013-2014

Fields of Interest:

Multiple access, wireless communications, channel coding, applied probability theory, information theory, computer science

Fields of expertise:

Coding theory, wireless communications, multiple access, information theory, applied probability theory, information theory, computer science, control theory

Skills:

Foreign language: English (fluent)

Software: Matlab, Simulink, WinEdt 3.1 ect.

PUBLICATIONS:

Peer-Reviewed Journals:

D. S. Osipov, A. A. Frolov, V. V. Zyablov On the user capacity for a multiple-access system in a vector disjunctive channel with errors// *Problems of Information Transmission*, 2013, Volume 49, Issue 4, pp 308-321

D. S. Osipov On error probability in a multiple access system under the influence of "tracking" interference// *Automation and Remote Control*, 2013, v. 74 № 10, pp. 1679–1687

D. S. Osipov, A. A. Frolov, V. V. Zyablov Multiple access system for a vector disjunctive channel // *Problems of Information Transmission*, 2012, Volume 48, Issue 3, pp 243-249

D.S. Osipov, F.V. Groshev The Information Transmission Rate in a Multiple Access System (in Russian)// *Information and Control Systems* 1(56), 2012, pp 67-75

D.S. Osipov On the Performance of a Non-Coherent DHA FH OFDMA System with Threshold Reception under Jamming (in Russian)//Information and Control Systems 6(49), 2010, pp 28-32

V. V. Zyablov, D. S. Osipov On the optimum choice of a threshold in a frequency hopping OFDMA system // Problems of Information Transmission Volume 44, Issue 2, pp 91-98

Monograph Chapters :

Dmitry Osipov Novel multiple access models and their probabilistic description (in “Trends in Telecommunications Technologies”, edited by: Christos J Bouras, ISBN: 978-953-307-072-8, Publisher: INTECH, March 2010) pp.297-316

D. Osipov, J. Paavola, J. Poikonen Multiple Access Methods (in Modulation and Coding Techniques in Wireless Communications; ed. E. Krouk and S. Semenov // John Wiley & Sons, 1st edition, 2011, ISBN: 978-0-470-74505-2) pp. 351-379

Conference proceedings:

International conferences and workshops:

Osipov D. Upper bound on the performance of an order statistics-based decoder, in: Proceedings of the Ninth International Workshop on Coding and Cryptography, April 13-17, Paris, France, 2015.

Osipov D. On jamming-proof signal-code constructions for a multiple access system, in: Proceedings XIV International Symposium on Problems of Redundancy in Information and Control Systems (June 1-5 2014). IEEE Press, 2014. P. 74 -77.

Osipov D. Reduced-Complexity Robust Detector in a DHA FH OFDMA System under Mixed Interference, in: Multiple Access Communications Vol. 8715: 7th International Workshop, MACOM 2014, Halmstad, Sweden, August 27-28, 2014. Proceedings. Halmstad : Springer International Publishing, 2014. P. 29-34.

Osipov D., Frolov A., Zyablov V. On the Capacity of a PPM UWB Multiple-Access System with a Single User Noncoherent Reception, in: Lecture Notes in Computer Science Vol. 8072: Wireless Access Flexibility. First International Workshop, WiFlex 2013, Kaliningrad, Russia, September 4-6, 2013. Proceedings. Berlin, Heidelberg : Springer Verlag, 2013. P. 49-57.

D. Osipov A Coded DHA FH OFDMA System with a Noncoherent ML Detector under Multitone Jamming// Multiple Access Communications. Proceedings of the 5th International Workshop on Multiple Access Communications, MACOM 2012, Maynooth, Ireland, November 19-20, Berlin: Springer-Verlag Berlin Heidelberg, Lecture Notes in Computer Science 2012, pp 37-48

D. Osipov Upper bounds for a coded DHA FH OFDMA system with noncoherent threshold reception// In proc. of the XIII International Symposium on Problems of Redundancy in Information and Control Systems 5-10 Sept. 2012 pp.53 – 56

D. S. Osipov, A. A. Frolov, V. V. Zyablov A Multiple Access System for Disjunctive Vector Channel// In proc. of the XIII International Workshop on Algebraic and Combinatorial Coding Theory (ACCT 2012) June 15 - 21, 2012, Pomorie, Bulgaria. P. 269-274.

D. Osipov On the probabilistic description of an asynchronous DHA FH OFDMA system with threshold noncoherent reception // In Multiple Access Communications Lecture Notes in Computer

F. Groshev, D. Osipov A DHA FH OFDMA system with multiple users//In. Proc. of the Twelfth International Workshop on Algebraic and Combinatorial Coding Theory (ACCT 2010) September 5 - 11, 2010, Akademgorodok, Novosibirsk, Russia pp. 154-161

D. Osipov On the performance of a FH-MC-CDMA system. // In Proc. of the 2nd International Workshop on Multiple Access Communications (MACOM 2009) affiliated with IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS - ICC-2009 14-15 June 2009, Dresden, Germany

D. Osipov On the probabilistic description of a FH-OFDMA with a MAXP receiver. // In Proc. of the XII Symposium "Problems of redundancy in information and control systems" , St.-Petersburg, May 26-30, 2009. p 144-149

D. Osipov Two different approaches to multistage decision-making in asynchronous OFDMA// In Proc. of the International Conference "Coding days in St. Petersburg", St. Petersburg, Russia, 6-10 October, 2008.

D. Osipov Asynchronous OFDMA system with woven turbo coded modulation. //In Proc. of the 15-th International Conference on Telecommunications (ICT 2008) and International Workshop on Multiple Access Communications (MACOM 2008), St.-Petersburg, June 16 – 19, 2008.

D. Osipov Asynchronous Orthogonal Frequency Division Multiple Random Access system performance.// In Proc. of the XI INTERNATIONAL SYMPOSIUM ON PROBLEMS OF REDUNDANCY IN INFORMATION AND CONTROL SYSTEMS , July 2-6 2007, Saint-Petersburg, Russia. pp. 144-148

Russian conferences proceedings

D. Osipov On the probability of error in a coded noncoherent DHA FH OFDMA system under "follower" jamming// In proc. of the 35th conference ITAS 2012 August 19 - 25, Petrozavodsk, Russia pp. 118-123

F. Groshev, D. Osipov A DHA FH OFDMA system with noncoherent reception under broadband and partial band jamming// In collected works of the 35-th conference of young scientists and specialists «Information technologies and systems - 2012» August 19 - 25, Petrozavodsk, pp. 194-198

D. Osipov, A. Frolov, V. V. Zyablov Multitone jamming-proof q-ary code-based signal-code construction //// In collected works of the 34-th conference of young scientists and specialists «Information technologies and systems - 2011», October 2 – 7, 2011, Gelendzhik, Russia pp. 168-173

F. Groshev, D. Osipov On a mechanism enabling rate increase in a DHA FH OFDMA// // In collected works of the 33-th conference of young scientists and specialists «Information technologies and systems» (ITAS 2010), Gelendzhik, Russia, September 20– 24, 2010, pp.. 69-73

D. Osipov, V. V. Zyablov Equidistant code based signal-code construction in a multiple access system// In collected works of the 32-th conference of young scientists and specialists «Information technologies and systems», Bekasovo, Russia, December 15-18, 2009, pp..145-151

F. Groshev, D. Osipov On the capacity of a multiple access system with threshold reception// In collected works of the 32-th conference of young scientists and specialists «Information technologies and systems», Bekasovo, Russia, December 15-18, 2009, pp..152-155

D. Osipov Channel estimation in a OFDMA system// In collected works of the 31-th conference of young scientists and specialists «Information technologies and systems», Bekasovo, Russia, December 15-18 (ITAS'08), Gelendzhik, Russia, September 29- October 3 2008 pp..177-183

D. S. Osipov Linear filter adaptive learning algorithm for channel prediction in a OFDM-based system (in Russian)// In collected works of the 31-th conference of young scientists and specialists «Information technologies and systems», Zvenigorod, September 18-21, 2007. pp. 92-98.

Articles in scientific collected works

Osipov D. S. Multistage Decision Making in Coded Asynchronous OFDMA // In Selected lectures on multiple access and queuing systems St.-P.:SUAI. p.114-118., 2008.

Invited talks:

Protection from unauthorized users' activity in multiple access communications. Transmission and reception techniques.” The 4th International Workshop on Multiple Access Communications, Trento, Italy September 11-13, 2011

“Latest Advances in developing CDMA models” in collaboration with V. V. Zyablov The 3th International Workshop on Multiple Access Communications, Barcelona, Spain, September 13-14, 2010