

Seznam vědeckých, odborných nebo uměleckých prací v členění odpovídajícím tabulce kvantifikovaných kritérií ČVUT

Samostatné části v mezinárodní monografii:

- [1] **Z. Bečvář** - M. Vondra - L. Novák, "Assessment of Speech Quality in VoIP," In *VoIP Technologies*. Published by InTech, 2011, pp. 27-44.
- [2] **Z. Bečvář** - P. Mach, "On Efficiency of ARQ and HARQ Entities Interaction in WiMAX Networks," In *Advanced Transmission Techniques in WIMAX*. Published by InTech, 2012, pp. 147-164.
- [3] **Z. Bečvář** - P. Mach - M. Vondra, "Handover Procedure in Femtocells," In *Femtocell Communications and Technologies*. Published by IGI Global, 2012, pp. 157-179.

Články v impaktovaných časopisech:

- [1] **Z. Bečvář** - P. Roux - P. Mach, "Fast Cell Selection with Efficient Active Set Management in OFDMA Networks with Femtocells," *EURASIP Journal on Wireless Communications and Networking*, accepted for publication in August 2012.
- [2] **Z. Bečvář** - P. Mach - B. Šimák, "Improvement of handover prediction in mobile WiMAX by using two thresholds," *Computer Networks*, Vol. 55, No. 16, 2011, pp. 3759-3773.
- [3] **Z. Bečvář** - P. Mach, "Fast Predicted Handover in IEEE 802.16 Networks," *European Transactions on Telecommunications*, Vol. 22, No. 2, 2011, pp. 68-80.
- [4] **Z. Bečvář** - R. Bešťák, "Overhead of ARQ Mechanism in IEEE 802.16 Networks," *Telecommunication Systems*, Vol. 46, No. 4, 2011, pp. 353-367.
- [5] P. Mach - **Z. Bečvář**, "QoS-Guaranteed Power Control Mechanism Based on the Frame Utilization for Femtocells," *EURASIP Journal on Wireless Communications and Networking*, Vol. 2011, No. 259253, 2011, pp. 1-16.
- [6] P. Mach - **Z. Bečvář** - R. Bešťák, "Handover of relay stations for load balancing in IEEE 802.16," *Wireless Communication and Mobile Computing*, Early view, 2011.
- [7] P. Mach - R. Bešťák - **Z. Bečvář**, "Optimization of association procedure in WiMAX networks with relay stations," *Telecommunication Systems*, Online First, 2011.

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- [1] **Z. Bečvář**, "Efficiency of Handover Prediction Based on Handover History," *Journal of Convergence Information Technology (JCIT)*, 2009, Vol. 4, No. 4, pp. 41-47.

Původní článek v českém vědeckém odborném časopise:

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- [2] **Z. Bečvář** - D. Houska, "Mechanismus ARQ v sítích WiMAX," *Access server*, Vol. 6., No. 2008120004, 2008, pp. 1-6.

Příspěvek na mezinárodní konferenci (ve sborníku):

- [1] M. Vondra - **Z. Bečvář**, "Connection Cost Based Handover Decision for Offloading Macrocells by Femtocells," *Wired/Wireless Internet Communication (WWIC 2012)*, Santorini, Greece, pp. 208-219, 2012.
- [2] M. Vondra - **Z. Bečvář**, "Handover with Consideration of Connection Cost in Femtocell Networks," *Wireless Telecommunications Symposium (WTS 2012)*, London, United Kingdom, 2012.
- [3] **Z. Bečvář** - P. Mach, "On Enhancement of Handover Decision in Femtocells," *4th IFIP Wireless Days*, Niagara Falls, Canada, 2011.
- [4] P. Mach - **Z. Bečvář**, "Efficient Routing of Data for Femtocells," *4th IFIP Wireless Days*, Niagara Falls, Canada, 2011.
- [5] P. Mach - **Z. Bečvář**, "Optimization of Power Control Algorithm for Femtocells Based on Frame Utilization," *IEEE 22nd International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2011)*, Toronto, Canada, 2011, pp. 207-211.
- [6] **Z. Bečvář** - P. Mach, "Adaptive Techniques for Elimination of Redundant Handovers in Femtocells," *International Conference on Networks (ICN 2011)*, St. Maarten, Netherlands, 2011, pp. 230-234.
- [7] P. Mach - **Z. Bečvář**, "Path Selection in WiMAX Networks with Mobile Relay Stations," *International Conference on Networks (ICN 2011)*, St. Maarten, Netherlands, 2011, pp. 208-219.
- [8] **Z. Bečvář** - P. Mach, "Reduction of Scanning Reporting Overhead in IEEE 802.16 Networks with Relays," *International Conference on Networks (ICN 2010)*, Menuires, France, 2010.
- [9] **Z. Bečvář** - P. Mach, "Adaptive Hysteresis Margin for Handover in Femtocell Networks," *International Conference on Wireless and Mobile Communications (ICWMC 2010)*, Valencia, Spain, 2010.
- [10] P. Mach - **Z. Bečvář**, "Dynamic Power Control Mechanism for Femtocells Based on the Frame Utilization," *International Conference on Wireless and Mobile Communications (ICWMC 2010)*, Valencia, Spain, 2010.
- [11] G. Vivier - M. Kamoun - **Z. Bečvář** - E. de Marinis - Y. Lohan - et al., "Femtocells for next-G Wireless Systems: The FREEDOM approach," *Future Network & Mobile Summit 2010*, Florence, Italy, 2010.
- [12] **Z. Bečvář** - P. Mach - R. Bešák, "Impact of Handover on VoIP Speech Quality in WiMAX Networks," *International Conference on Networks (ICN 2009)*, Cancun, Mexico, 2009, pp. 281-286.
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- [14] **Z. Bečvář** - P. Mach - R. Bešák, "Initialization of Handover Procedure in WiMAX Networks," *ICT-MobileSummit 2009*, Santander, Spain, pp. 110-119.
- [15] I. Pravda - **Z. Bečvář**, "Extended E-model for VoIP Systems Assessment," *Networking and Electronic Commerce Research Conference (NAEC 2009)*, Lago di Garda, Italy, 2009, pp. 85-91.
- [16] **Z. Bečvář** - P. Mach - R. Bešák, "Optimization of Handover Scanning Procedure in WiMAX Networks with Relay Stations," *IEEE International Symposium on Wireless Pervasive Computing 2008 (ISWPC 2008)*, Santorini, Greece, May 2008, pp. 581-585.

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- [18] **Z. Bečvář** - J. Zelenka - M. Brada, "Impact of Saturation on Speech Quality in VoIP," *IEEE International Conference on Systems, Signals and Image Processing (IWSSIP2008)*, Bratislava, 2008, pp. 381-384.
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- [20] **Z. Bečvář** - L. Novák - J. Zelenka - M. Brada - P. Slepíčka, "Impact of Additional Noise on Subjective and Objective Quality Assessment in VoIP," *IEEE International Workshop on Multimedia Signal Processing (MMSP 2007)*, Chania, Greece, October 2007, pp. 39-42.
- [21] **Z. Bečvář**, "Impact of Relay Stations Implementation on the Handover in WiMAX," *Personal Wireless Communications (PWC2007)*, Prague, September 2007, pp. 107-114.
- [22] **Z. Bečvář** - J. Zelenka - M. Brada - L. Novak, "Comparison of Common PLC Methods Used in VoIP Networks," *IEEE International Conference on Systems, Signals and Image Processing (IWSSIP2007)*, Maribor, Slovenia, June 2007, pp.S13-07.
- [23] **Z. Bečvář** - J. Zelenka, "Implementation of Handover Delay Timer into WiMAX," *6th Conference on Telecommunications (ConfTele2007)*, Peniche, Portugal, May 2007, pp. 401-404.
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- [1] P. Mach - **Z. Bečvář**, "Impact of Femtocells Backbone Capacity Limitation on Performance of Power Control," *Conference on Research in Telecommunication Technologies (RTT 2011)*, Brno, 2011, pp. 61-65.
- [2] M. Vondra - **Z. Bečvář**, "Creating the Neighbor Cell List of New-installed Femtocell," *Digital Technologies (DT 2010)*, Žilina, 2010.
- [3] **Z. Bečvář**, "Innovation of the Subject Telecommunication Systems and Networks," *Conference on Research in Telecommunication Technologies (RTT 2010)*, Ostrava, 2010, pp. 79-80.
- [4] **Z. Bečvář** - I. Pravda - J. Vodrážka, "Quality Evaluation of Narrowband and Wideband IP Telephony," *Digital Technologies (DT 2008)*, Žilina, 2008, pp. 1-4.
- [5] **Z. Bečvář** - J. Zelenka - P. Bezpalec, "New Practice Exercises with VoIP Technology," *Workshop 2008*, Praha, 2008, pp. 156-157.
- [6] **Z. Bečvář** - J. Zelenka - P. Bezpalec, "Innovation of Practice Exercises in Subject Integrated Service Digital Networks," *Conference on Research in Telecommunication Technologies (RTT2007)*, Žilina, 2007, pp. 20-22.
- [7] P. Slepíčka - **Z. Bečvář**, "Evaluation of 3SQM Algorithm Performance on Fixed-Point DSP," *Workshop 2007*, Prague, pp. INF035.

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- [10] **Z. Bečvář** - J. Zelenka, "Handovers in the Mobile WiMAX," *Research in Telecommunication Technologies (RTT2006)*, Brno, 2006, pp. 147-150.
- [11] J. Zelenka - **Z. Bečvář**, "Speech Quality Assessment in VoIP," *Research in Telecommunication Technology (RTT 2006)*, Brno, 2006, pp. 364-366.
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- [13] J. Římal - J. Chod - **Z. Bečvář**, "Physical Measurement on Building Structures and Transfer of Measured Data," *International Workshop on Physical and Material Engineering 2006*, Bratislava, 2006, pp. 228-229.