

BIBLIOGRAPHY (JUNE 10, 2008)

IEEE Papers

- Štěpán Kučera, Sonia Aïssa, Koji Yamamoto, and Susumu Yoshida, “**Asynchronous distributed power and rate control in ad hoc networks: A game-theoretic approach,**” to appear in *IEEE Transactions on Wireless Communications (IEEE TWC)*, ??? 2008

IEICE Papers

- Štěpán Kučera, Koji Yamamoto, and Susumu Yoshida, “**Optimum Practical Design of Distributed and Asynchronous Power Control for Wireless Networks with Shared Bands,**” *IEICE Trans. Fundamentals, Special Section on Multi-dimensional Mobile Information Networks*, Nov. 2007

International IEEE Conferences

- Štěpán Kučera, Koji Yamamoto, Hidekazu Murata, and Susumu Yoshida, “**A Cross-layer Optimized Architecture with Accelerated Convergence for Cognitive Radio Networks,**” in *Proceedings of Wireless Personal Multimedia Communications Symposium (WPMC) 2007*, Jaipur, India, Dec. 03 – 06 2007
- Štěpán Kučera, Sonia Aïssa, and Susumu Yoshida, “**Cross-layer Optimized Transmit Power Allocation in Distributed Wireless Networks with Stability Constraint,**” in *Proceedings of IEEE Global Communications Conference (IEEE Globecom) 2007*, Washington, D.C., USA, Nov. 26 – 30 2007
- Štěpán Kučera, Sonia Aïssa, Koji Yamamoto, and Susumu Yoshida, “**Asynchronous Distributed Power and Rate Control in Ad Hoc Networks with Stochastic Channels,**” in *Proceedings of IEEE Wireless Communications and Networking Conference (IEEE WCNC) 2007*, Hong Kong, China, Mar. 11 – 15 2007
- Štěpán Kučera, Koji Yamamoto, and Susumu Yoshida, “**Distributed power control for wireless ad hoc networks: A game-theoretic approach based on best-response functions,**” in *Proceedings of IEEE Vehicular Technology Conference (IEEE VTC) Fall 2006*, Montreal, Canada, Sep. 25 – 28 2006
- Štěpán Kučera, Koji Yamamoto, and Susumu Yoshida, “**A game-theoretic framework for distributed power control in wireless ad hoc networks,**” in *Proceedings of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC) 2006*, Helsinki, Finland, Sep. 11 – 14 2006

International IEICE Conferences

- Štěpán Kučera, Koji Yamamoto, Hidekazu Murata, and Susumu Yoshida, “**Band Selection Scheme With Power/Rate Control Stability Enhancement in Cognitive Radio Networks,**” in *Proceedings of IEICE General Conference*, Nagoya, Japan, Mar. 20 – 23 2007
- Mitsumasa Handa, Štěpán Kučera, Koji Yamamoto, Hidekazu Murata, and Susumu Yoshida, “**Study of Media Access Control of Distributed Power Controlled Wireless Ad Hoc Networks,**” in *Proceedings of IEICE General Conference*, Nagoya, Japan, Mar. 20 – 23 2007
- Shan Lin, Štěpán Kučera, Koji Yamamoto, Hidekazu Murata, and Susumu Yoshida, “**Stabilization of Distributed Power Control in Wireless Networks with Random Channels by Averaging,**” in *Proceedings of IEICE General Conference*, Nagoya, Japan, Mar. 20 – 23 2007

- Štěpán Kučera, Koji Yamamoto, and Susumu Yoshida, “**Asynchronous power and rate control scheme for wireless ad hoc networks with fading channels,**” in *Proceedings of IEICE Society Conference*, Kanazawa, Japan, Sep. 19 – 22 2006
- Shan Lin, Štěpán Kučera, Koji Yamamoto, and Susumu Yoshida, “**Stabilization of distributed power control in fading channels**” in *Proceedings of IEICE Society Conference*, Kanazawa, Japan, Sep. 19 – 22 2006
- Štěpán Kučera, Koji Yamamoto, and Susumu Yoshida, “**Efficient power control scheme for multihop radio networks,**” in *Proceedings of IEICE General Conference*, Tokyo, Japan, Mar. 24 – 27 2006
- Štěpán Kučera, Koji Yamamoto, Azman-Osman Lim, and Susumu Yoshida, “**Interference-limited performance study of routing schemes in unidirectional multihop radio networks,**” in *Proceedings of IEICE Society Conference*, Sapporo, Japan, Sep. 20 – 23 2005

Workshops and Technical Reports

- Štěpán Kučera, Koji Yamamoto, Hidekazu Murata, and Susumu Yoshida, “**On Practical Design of Power Control Schemes for Distributed Wireless Networks with Shared Bands,**” in *IEICE Technical Report, Signal Processing Technical Group*, Kunigami, Okinawa, Japan, Vol. 106, No. 476, pp. 91 – 96, Jan. 24 – 26 2007
- Luděk Kučera and Štěpán Kučera, “**Wireless communication in random geometric topologies,**” in *Lecture Notes in Computer Science Series, Springer Verlag*, International Workshop on Algorithmic Aspects of Wireless Sensor Networks, held in conjunction with International Colloquium on Automata, Languages and Programming (ICALP) 2006, Venice, Italy, Jul. 15 2006
- Štěpán Kučera, Koji Yamamoto, and Susumu Yoshida, “**Best-response based distributed power control and its convergence to nash equilibrium,**” in *Proceedings of IEICE Ad Hoc Networks Workshop of IEEE Communication Society, Japan Chapter*, Osaka, Japan, Jun. 29 – 30 2006
- Štěpán Kučera, “**Game-theoretic concepts in wireless communications,**” in *Annual Dynamically Evolving, Large-scale Information Systems (DELIS) Project Meeting: Subproject 4 – Game Theoretic and Organizational Economics Inspired Approaches*, Prague, Czech Republic, Feb. 9 – 11 2005

Theses

- Doctoral thesis: Cross-layer design of resource management in wireless networks with distributed control, Kyoto University, Japan, Mar. 26 2008
- Master thesis: Adaptive linear MMSE detektor pro reception of CDMA signals, Czech Technical University, Czech Republic, Feb. 18 2003

International Conference Activities

- TPC member at IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (IEEE WiMob) 2008, Avignon, France
- TPC member at IEEE International Wireless Communications and Mobile Computing Conference (IEEE IWCMC) 2008, Crete Island, Greece
- Reviewer at IEEE Global Communications Conference (IEEE Globecom) 2007, Washington, D.C., USA
- Reviewer at IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC) 2007, Athens, Greece
- Reviewer, Session chair at IEEE Wireless Communications and Networking Conference (IEEE WCNC) 2007, Hong Kong, China

Honours and Awards

- The third IEEE Kansai Student Researcher Encouragement Prize 2007, Japan, Feb. 6 2007
- IEEE Vehicular Technology Society Japan 2006 Best Student Paper Award at IEEE Vehicular Technology Conference (IEEE VTC) Fall 2006, Montreal, Canada, Sep. 25 – 28 2006.
- Multiple Dean's Awards for outstanding study results at Faculty of Electrical Engineering of Czech Technical University between 1996-2003

Fellowships and Scholarships

- 2006-2007 Kyoto University, Kyoto, Japan
Research Assistant at 21st Century "Center of Excellence" for Research and Education of Fundamental Technologies in Electrical and Electronic Engineering at Kyoto University
Grant no. 14213201 by Japan Society for Promotion of Science (JSPS)
- 2006-2008 Kyoto University, Kyoto, Japan
Extension of Scholarship No. 040705 by Ministry of Education, Culture, Sports, Science and Technology (MEXT), Government of Japan
- 2004-2006 Kyoto University, Kyoto, Japan
Scholarship No. 040705 by Ministry of Education, Culture, Sports, Science and Technology (MEXT), Government of Japan

Grants

- Grant No. 102 / 05 / 0852 of the Czech Grant Agency
- Grant No. 102 / 01 / 0930 of the Czech Grant Agency

Professional Memberships

- IEEE Communication Society from 2007
- Institute of Electrical and Electronics Engineers (IEEE) of USA from 2006
- Institute of Electronics, Information and Communication Engineers (IEICE) of Japan from 2005
- Czech Academy of Sciences (Institute of Photonics and Electronics) from 2003