Curriculum Vitae

Name: Emil Jeřábek Date of birth: June 27, 1977

Place of birth: Prague, Czechoslovakia

Address: Institute of Mathematics, AS CR

Žitná 25

115 67 Praha 1 Czech Republic

 $+420\ 222\ 090\ 772$

jerabek@math.cas.cz

http://math.cas.cz/~jerabek/index.html

Education

1995–2001 undergraduate studies of Mathematics at the Faculty of Mathematics and Physics of the Charles University, Prague

Master's degree (Mgr) obtained May 2001

1995–2002 undergraduate studies of Logic and Linguistics at the Faculty of Philosophy and Arts of the Charles University, Prague

Master's degree (Mgr) obtained February 2002

2001–2005 postgraduate studies at the Faculty of Mathematics and Physics of the Charles University, Prague

Supervisor: J. Krajíček, Mathematical Institute of the Academy of Sciences of the Czech Republic, Prague

Ph.D. degree obtained June 2005

Employment

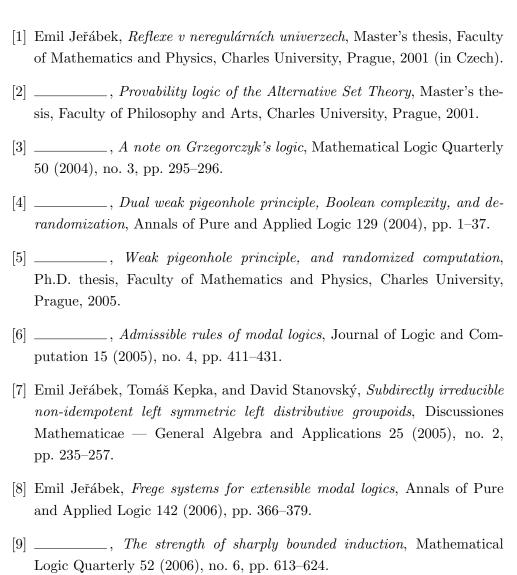
- Since 1999: part-time position at the Faculty of Mathematics and Physics of the Charles University.
- 2003–2005: part-time graduate student position at the Mathematical Institute of the Academy of Sciences of the Czech Republic.
- March-August 2005: postdoc position at the Department of Philosophy of the University of Utrecht.

- October 2005–October 2006: postdoc position at the Department of Computer Science of the University of Toronto.
- Since October 2006: full-time position at the Mathematical Institute of AS CR.

Awards

• Otto Wichterle Award, 2010.

Publications



[10] ______, Complexity of admissible rules, Archive for Mathematical Logic 46 (2007), no. 2, pp. 73–92. [11] _____, On independence of variants of the weak pigeonhole principle, Journal of Logic and Computation 17 (2007), no. 3, pp. 587–604. [12] Emil Jeřábek and Michal Rössler, Fragment of nonstandard analysis with a finitary consistency proof, Bulletin of Symbolic Logic 13 (2007), no. 1, pp. 54-70. [13] Emil Jeřábek, Approximate counting in bounded arithmetic, Journal of Symbolic Logic 72 (2007), no. 3, pp. 959–993. [14] _____, Independent bases of admissible rules, Logic Journal of the IGPL 16 (2008), no. 3, pp. 249–267. [15] _____, Proof complexity of the cut-free calculus of structures, Journal of Logic and Computation 19 (2009), no. 2, pp. 323–339. [16] _____, Substitution Frequent and extended Frequent proof systems in nonclassical logics, Annals of Pure and Applied Logic 159 (2009), no. 1–2, pp. 1–48. [17] _____, Approximate counting by hashing in bounded arithmetic, Journal of Symbolic Logic 74 (2009), no. 3, pp. 829-860. [18] ______, Canonical rules, Journal of Symbolic Logic 74 (2009), no. 4, pp. 1171-1205. [19] _____, Abelian groups and quadratic residues in weak arithmetic, Mathematical Logic Quarterly 56 (2010), no. 3, pp. 262–278. [20] _____, Admissible rules of Lukasiewicz logic, Journal of Logic and Computation 20 (2010), no. 2, pp. 425–447. ______, Bases of admissible rules of Lukasiewicz logic, Journal of Logic and Computation 20 (2010), no. 6, pp. 1149–1163. $\underline{\hspace{1cm}}$, On theories of bounded arithmetic for NC^1 , Annals of Pure and Applied Logic 162 (2011), no. 4, pp. 322–340.

[23] _____, A sorting network in bounded arithmetic, Annals of Pure and

Applied Logic 162 (2011), no. 4, pp. 341–355.

Conference talks

- A note on Grzegorczyk's logic, Logic Colloquium (LC2003), Helsinki, August 2003.
- Bounded arithmetic in 3-valued logic, Logic Colloquium (LC2004), Torino, July 2004.
- Hardness amplification in bounded arithmetic, 24mes Journes d'Arithmtique Faible (JAF24), Fontainebleau, May 2005.
- Approximate counting in bounded arithmetic, New Directions in Proof Complexity (Isaac Newton Institute Workshop LAAW04), Cambridge, April 2006.
- Canonical rules, Derivation Rules and Unification (International Workshop on Modal Logic IWML06), İstanbul Kültür Üniversitesi, June 2006.
- Proof systems for modal logics, Logic Colloquium (LC2007), Wrocław, July 2007.
- Admissible rules of Łukasiewicz logic, Logic Colloquium (LC2009), Sofia, July 2009.
- On monotone sequent calculus, Barriers in Computational Complexity, Princeton, August 2009.
- Weak pigeonhole principle and approximate counting, Ramsey Theory in Logic, Combinatorics and Complexity (RaTLoCC 2009), Bertinoro, October 2009.
- Approximate counting in bounded arithmetic, 29es Journées sur les Arithmétiques Faibles (JAF29), Warsaw, June 2010.
- Proofs with monotone cuts, Logic Colloquium (LC2010), Paris, July 2010.

Other activities

I am a reviewer for the Zentralblatt MATH Database.