

# Curriculum Vitae

## Petr Cintula

Institute of Computer Science  
Czech Academy of Sciences  
Pod Vodárenskou věží 271/2  
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**Born:** 13. 8. 1978

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## Education and qualification

- Docent, Applied Mathematics, Czech Technical University in Prague, 1. 12. 2014  
Thesis title: *A General Framework for Mathematical Fuzzy Logic*
- Privatdozent, Computational Logic, Vienna University of Technology, 22. 5. 2013  
Thesis title: *Universal Methods in Mathematical Fuzzy Logic*
- PhD, Mathematical Engineering, Czech Technical University in Prague, 17. 2. 2005  
Thesis title: *From Fuzzy Logic to Fuzzy Mathematics*, Supervisor: Petr Hájek
- Masters (Ing.), Software Engineering, Czech Technical University in Prague, 18. 6. 2001  
Thesis title: *The  $\text{LII}$  and  $\text{LII}_{\frac{1}{2}}$  Logics*, Supervisor: Petr Hájek

## Employment history

2001–present Institute of Computer Science, Academy of Sciences of the Czech Republic,  
senior scientist (2013–present); scientist (2005–13); PhD student (2001–05)  
2013 University of Bern, visiting researcher (May–June)  
2011–2012 Vienna University of Technology, visiting researcher (August–April)

## Research interests

- Mathematical fuzzy logic and formal fuzzy mathematics
- Abstract algebraic logic and substructural logics
- Reasoning under uncertainty

## Basic scientometric data

- 37 journal papers (plus one in print), 4 edited books, 4 book-chapters, and 16 papers in conference proceedings
- Citations: 450+ (Web of Science), 550+ (Scopus), 1700+ (Google Scholar), 190+ (MathSciNet)
- H-index: 15 (Web of Science), 15 (Scopus), 23 (Google Scholar), 9 (MathSciNet)
- 100+ talks at conferences (9 of them invited and 50+ more presented by co-authors)

## Awards

- Young researchers' award for outstanding achievements bestowed by the Czech Academy of Sciences, 2007
- Junior Scientist Award bestowed by the Learned Society of the Czech Republic, 2006
- Josef Hlávka award for young employees of the Czech Academy of Sciences, 2006
- 1st class award of the rector of the Czech Technical University for an outstanding PhD thesis, 2005
- Otto Wichterle award bestowed by the Academy of Sciences of the Czech Republic, 2005
- Best Paper Award at IFSA 2005 (joint paper with L. Běhounek)

## Stays abroad

- University of the Witwatersrand, Johannesburg, South Africa, (July 2016)
- University of Bern, Bern, Switzerland, (May and June 2013)
- Vienna University of Technology, Vienna, Austria, (from August 2011 till April 2012)
- Slovak Technical University, Bratislava, Slovakia (January 2004; February 2003)
- Johannes Kepler University, Linz, Austria (February 2004, 2005, March/April 2007)
- Research Institute for Mathematical Sciences, Kyoto, Japan (November 2015)
- Short-time (less than one month, not including conferences): University of Milano (March 2002), Johannes Kepler University (July 2008; August 2006; November 2002, 2004, 2005, 2006, 2007, 2008), Artificial Intelligence Research Institute of Spanish Research Council (February 2011; June 2007; July 2010, 2011, 2012; August 2005; September 2006, 2015; October 2003, 2004, 2009, 2011; November 2008), University of Siena (April 2008; July and August 2009; November 2004, 2007), University of Salerno (November 2004), Vienna University of Technology (March 2008; July 2008; August 2005; September 2013; October 2006; November 2005), Vanderbilt University (March 2008, 2009; May 2009), Kyoto University (June 2010; November 2009), University of Bern (January 2015; March 2012, 2016; April 2014; October 2009), University of Cagliari (May 2016; July 2014; September 2015)
- Seminar lectures: Johannes Kepler University, Kyoto University (2x), University of Barcelona (7x), University of Bern (2x), University of Milan, University of Salerno, Vanderbilt University, Vienna University of Technology (2x), University of Cagliari (3x), University of the Witwatersrand, University of Johannesburg

## Grants (principal (co)-investigator)

- *Syntax Meets Semantics: Methods, Interactions, and Connections in Substructural logic*, 689176 of Horizon 2020 Marie Skłodowska-Curie RISE, 2016–2018
- *Modelling vague quantifiers in mathematical fuzzy logic*, joint project of Austrian Science Fund I1897-N25 and Czech Science Foundation GF15-34650L, 2015–2018
- *An Order-Based Approach to Non-Classical Propositional and Predicate Logics*, GA13-14654S of the Czech Science Foundation, 2013–2016
- *Center of Excellence–Institute for Theoretical Computer Science (CE-ITI)*, GBP202/12/G061 of the Czech Science Foundation, 2012–2018
- *A Multivalued Approach to Optima and Equilibria in Economics*, GAP402/12/1309 of the Czech Science Foundation, 2012–2014
- *Mathematical Fuzzy Logic in Computer Science*, GAP202/10/1826 of the Czech Science Foundation, 2010–2014 (Principal investigator since 2013 only)
- *Logical Foundations of Semantics*, GD401/09/H007 of the Czech Science Foundation, 2009–2012
- *Dynamic Formal Systems*, IAA900090703 of the Grant Agency of the Academy of Sciences of the Czech Republic, 2007–2010
- *Formal Foundations of Fuzzy Preference Modelling*, MEB060717 of the Ministry of Education, Youth and Sports, 2007–2008
- *Formal Theories of Mathematical Structures with Vagueness*, KJB100300502 of the Grant Agency of the Academy of Sciences of the Czech Republic, 2005–2007

## Grants (team member)

- *Fuzzy Set Theory as a Foundation of Fuzzy Mathematics*, ME09110 of the Ministry of Education, Youth and Sports, 2009–2010
- *Logical Models of Reasoning with Vague Information*, GEICC/08/E018 of the Czech Science Foundation (a part of ESF Eurocores-LogICCC project FP006), 2008–2011
- *Institute for Theoretical Computer Science*, 1M0545 of the Ministry of Education, Youth and Sports, 2005–2011
- *Mathematical Foundations of Inference and Decision-Making under Uncertainty*, IAA100 300503 of the Grant Agency of the Academy of Sciences of the Czech Republic, 2005–2009
- *Intelligent Models, Algorithms, Methods and Tools for the Semantic Web*, 1ET100300419 of the Grant Agency of the Academy of Sciences of the Czech Republic, 2004–2008
- *Logical Foundations of Semantics and Knowledge Representation*, GD401/03/H047 of the Czech Science Foundation, 2003–2007
- *TARSKI – Theory and Applications of Relational Structures as Knowledge Instruments*, OC 274.001 of the Ministry of Education, Youth and Sports (a part of ESF COST Action 274), 2001–2005
- *Mathematical Foundations of Inference with Vagueness and Uncertainty*, IAA1030004 of the Grant Agency of the Academy of Sciences of the Czech Republic, 2000–2004

## Invited lectures

- *A Gentle Introduction to Mathematical Fuzzy Logic*, two-lecture tutorial, 2nd European Summer School on Fuzzy Logic and Applications, Czech Republic, 2016
- *Substructural Logics: A Logical Glimpse at Residuated Lattices*, The 91st Workshop on General Algebra, Brno, Czech Republic, 2016
- *Logics of graded predicates*, ManyVal 2015, Les Diablerets, Switzerland, 2015
- *First-order non-classical logics: an order-based approach*, Compositional Meaning in Logic, Austria, 2014
- *Mathematical Fuzzy Logic: First-Order and Beyond*, two-lecture tutorial, International Workshop ‘Information, Uncertainty, and Imprecision’, Czech Republic, 2013
- *From (Deductive) Fuzzy Logic to (Logic-Based) Fuzzy Mathematics*, European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty, Italy, 2009
- *Fuzzy Class Theory: A State of the Art*, 30th Linz Seminar on Fuzzy Set Theory, Austria, 2009
- *First-Order Fuzzy Logics: Recent Development*, Universal Logic 2007, China, 2007
- *The Apparatus of Fuzzy Class Theory* (with L. Běhounek), Fuzzy Set Theory and its Applications, Slovakia, 2006

## Program Committee Memberships

- *IEEE International Symposium on Multiple-Valued Logic*, Novi Sad 2017
- *Tbilisi Symposium on Language, Logic and Computation*, Tbilisi 2015
- *Logica*, Hejnice 2013–present
- *Logic, Algebra and Truth Degrees*, Phalaborwa 2016, Vienna 2014, Kanazawa 2012, and Siena 2008
- *Non-Classical Modal and Predicate Logics*, Guangzhou 2011 (co-chair)
- *Topology, Algebra, and Categories in Logic 2011*, Marseille 2011
- *EUSFLAT*, Milan 2013, Aix-Les-Bains 2011, and Lisbon 2009

- *Linz Seminar*, Linz 2010 (co-chair)
- *Non-Classical Mathematics*, Hejnice 2009 (co-chair of the Steering Committee)
- *International Student Conference on Applied Mathematics and Informatics*, 2009–present
- *Logical Models of Reasoning with Vague Information*, Čejkovice 2009
- *2nd Czech-Catalan Conference in Mathematics*, Barcelona 2006
- *Workshop on Weighted Logics for AI* at IJCAI Beijing 2013 and ECAI Montpellier 2012

### Organization of scientific meetings

- *TACL 2017*, Prague 2017 (co-chair)
- *ManyVal 2013*, Prague 2013 (chair)
- *Logic Algebra and Truth Degrees*, Vienna 2014, Prague 2010 (chair)
- *Beauty of Logic II*, Prague 2010
- *Logical Models of Reasoning with Vague Information*, Čejkovice 2009 (chair)
- *Uncertainty: Reasoning about Probability and Vagueness*, Prague 2006
- *Beauty of Logic*, Prague 2005
- *Special sessions* at FSTA 2006 and 2010; ESUFLAT 2007, 2009, and 2011; CSL 2010; UNILOG 2010 and 2013 (2x); LPAR 2013

### Editorial work

- Associate editor of *Archive for Mathematical Logic*, 2012–present
- Area editor of *Fuzzy Sets and Systems*, 2015–present
- Area Scientific Editor of the *Journal of Applied Logic*, 2014–present
- Member of the editorial board of *Soft Computing*, 2012–2015
- *Handbook of Mathematical Fuzzy Logic, volume 3* (with C. Fermüller and C. Noguera), volumes 58 of Studies in Logic, Mathematical Logic and Foundations, College Publications, London, 384 pages, 2015
- *Handbook of Mathematical Fuzzy Logic, volumes 1 and 2* (with P. Hájek and C. Noguera), volumes 37 and 38 of Studies in Logic, Mathematical Logic and Foundations, College Publications, London, 492 and 480 pages, 2011
- *Understanding Vagueness. Logical, Philosophical and Linguistic Perspectives*, (with C. Fermüller, L. Godo, and P. Hájek), volume 36 of Studies in Logic, College Publications, London, 432 pages, 2011
- *Witnessed Years: Essays in Honour of Petr Hájek*, (with Z. Haniková and V. Švejdar), volume 37 of Tributes, College Publications, London, 416 pages, 2009
- Special issue of *Logic Journal of the IGPL* “Non-Classical Modal and Predicate Logics” (with R. Iemhoff and S. Ju), 22(3):411–513, 2014
- Special issue of *Fuzzy Sets and Systems* “Linz Seminar 2010” (with E.P. Klement and L. Stout), 197:1–97, 2012
- Special issue of *Journal of Logic and Computation* “Mathematical Fuzzy Logic” (with G. Metcalfe and C. Noguera), 21(5):715–862, 2011
- Special issues of *Fuzzy Sets and Systems* “Formal Methods for Fuzzy Mathematics, Approximation and Reasoning, Parts I and II” (with L. Běhounek, V. Novák, and I. Perfilieva), 159(14):1727–1835, 2008 and 160(8):1003–1053, 2009
- Volumes of abstracts of: Linz Seminar 2010, LATD 2010, and NCMPL 2012

## Teaching experience

### Courses:

- *Foundations of Fuzzy Logic*, Czech Technical University, 2012/13, 2014/15
- *Fuzzy Logic*, Vienna University of Technology, 2011/12, 2013/14, 2015/16
- *Mathematical Fuzzy Logic* (with L. Běhounek, R. Horčík), Charles University, 2010/11
- *Mathematical Fuzzy Logic* (with C. Noguera), Charles University, 2013/14
- *Applied Non-Classical Logics*, Czech Technical University, 2004/05–2006/07, 2008/09, 2013/14
- *General Theories of Logical Systems*, Charles University, 2005/06–2007/08, 2010/11, 2012/13
- *Linear Algebra C*, Czech Technical University, 2001/02
- *Linear Algebra A* (exercise), Czech Technical University, 1998/1999–2002/03

### PhD student supervised:

- 2015–present, Eva Kolovratníková, Charles University

### Master students supervised:

- 2008, Pavel Rusnok, *Probability in Formal Fuzzy Logic*, Czech Technical University
- 2006, Josef Kučera, *Software Toolbox for Formal Fuzzy Logics*, Czech Technical University
- 2006, Jakub Hytka, *Contributions to the Formal Theory of Fuzzy Orderings*, Czech Technical University

### Tutorials:

- *A Gentle Introduction to Mathematical Fuzzy Logic*, invited tutorial, 2nd European Summer School on Fuzzy Logic and Applications, Čeladná, Czech Republic, 2016
- *Tutorial on Mathematical Fuzzy Logic* (with C. Noguera), Isralog, Haifa, Israel, 2014
- *A Gentle Introduction to Mathematical Fuzzy Logic* (with C. Noguera), European Summer School in Logic, Language and Information, Tübingen, Germany, 2014
- *Logic, Algebra and Implication* (with C. Noguera), 4th World Congress and School on Universal Logic, Rio de Janeiro, Brazil, 2013
- *Mathematical Fuzzy Logic* (with L. Běhounek), 4th World Congress and School on Universal Logic, Rio de Janeiro, Brazil, 2013
- *Mathematical Fuzzy Logic: First-Order and Beyond*, invited tutorial, International Workshop ‘Information, Uncertainty, and Imprecision’, Olomouc, Czech Republic, 2013
- *Abstract Algebraic Logic: Theory and Applications* (with C. Noguera), European Summer School in Logic, Language and Information, Opole, Poland, 2012
- *Mathematical Fuzzy Logic* (with P. Hájek), 1st World Congress and School on Universal Logic, Montreux, Switzerland, 2005

### Additional professional activities

- Member of the Supervisory Board of the Institute of Theory of Information and Automation, 2009–present
- Member of the Board of the Institute of Computer Science, 2007–present; chair since 2012
- Coordinator of the working group of Mathematical Fuzzy Logic (105 members from more than 20 countries)
- Member of the Council of the Czech Society of Cybernetics and Informatics, 2007–2016

- Member of the Scientific Council of the Czech Society of Cybernetics and Informatics, 2011–present
- Member of the board of PhD study programs: Mathematical Engineering (FNSPE Czech Technical University in Prague, 2011–present), Artificial Intelligence and Biocybernetics (FEE Czech Technical University in Prague, 2013–present), and Informatics (FS Palacký University in Olomouc, 2013–present)
- Chair of the *Svoboda award* bestowed by Czech Society of Cybernetics and Informatics, 2010–2016
- Member of: Czech Society for Cybernetics and Informatics, Union of Czech Mathematicians and Physicists, and European Society for Fuzzy Logic and Technology
- Reviewer for Mathematical Reviews and peer-reviewed conferences and journals (e.g. *Annals of Pure and Applied Logic*, *Archive for Mathematical Logic*, *Fundamenta Informaticae*, *Fuzzy Sets and Systems*, *International Journal of Approximate Reasoning*, *Journal of Logic and Computation*, *Journal of Symbolic Logic*, *Logical Journal of IGPL*, *Mathematical Logic Quarterly*, *Studia Logica*, *Theoretical Computer Science*)

### **Publications — chapter in books**

- [1] Petr Cintula, Rostislav Horčík, and Carles Noguera. The quest for the basic fuzzy logic. In Franco Montagna, editor, *Petr Hájek on Mathematical Fuzzy Logic*, number 6 in *Outstanding Contributions to Logic*, pages 245–290. Springer, 2015.
- [2] Libor Běhounek, Petr Cintula, and Petr Hájek. Introduction to mathematical fuzzy logic. In Petr Cintula, Petr Hájek, and Carles Noguera, editors, *Handbook of Mathematical Fuzzy Logic - Volume 1*, volume 37 of *Studies in Logic, Mathematical Logic and Foundations*, pages 1–101. College Publications, London, 2011.
- [3] Petr Cintula and Carles Noguera. A general framework for mathematical fuzzy logic. In Petr Cintula, Petr Hájek, and Carles Noguera, editors, *Handbook of Mathematical Fuzzy Logic - Volume 1*, volume 37 of *Studies in Logic, Mathematical Logic and Foundations*, pages 103–207. College Publications, London, 2011.
- [4] Petr Cintula and Ondrej Majer. Towards evaluation games for fuzzy logics. In Ondrej Majer, Ahti-Veikko Pietarinen, and Tero Tulenheimo, editors, *Games: Unifying Logic, Language, and Philosophy*, volume 15 of *Logic, Epistemology, and the Unity of Science*, pages 117–138. Springer, 2009.

### **Publications — journal papers**

- [1] Petr Cintula and Francesco Paoli. Is multiset consequence trivial? To appear in *Synthese*.
- [2] Libor Běhounek, Petr Cintula, Christian G. Fermüller, and Tomáš Kroupa. Representing strategic games and their equilibria in many-valued logics. *Logic Journal of the Interest Group of Pure and Applied Logic*, 24(3):238–267, 2016.
- [3] Petr Cintula. A note on axiomatizations of Pavelka-style complete fuzzy logics. *Fuzzy Sets and Systems*, 292:160–174, 2016.
- [4] Petr Cintula and Carles Noguera. Implicational (semilinear) logics II: Disjunction and completeness properties. *Archive for Mathematical Logic*, 53(3):353–372, 2016.

- [5] Libor Běhounek, Ulrich Bodenhofer, Petr Cintula, Susanne Saminger-Platz, and Peter Sarkoci. Graded dominance and related graded properties of fuzzy connectives. *Fuzzy Sets and Systems*, 262:78–101, 2015.
- [6] Petr Cintula and Carles Noguera. A Henkin-style proof of completeness for first-order algebraizable logics. *Journal of Symbolic Logic*, 80(1):341–358, 2015.
- [7] Petr Cintula and Carles Noguera. A note on natural extensions in abstract algebraic logic. *Studia Logica*, 103(4):815–823, 2015.
- [8] Petr Cintula, Rostislav Horčík, and Carles Noguera. Non-associative substructural logics and their semilinear extensions: Axiomatization and completeness properties. *The Review of Symbolic Logic*, 6(3):394–423, 2013.
- [9] Petr Cintula and Tomáš Kroupa. Simple games in Łukasiewicz calculus and their cores. *Kybernetika*, 49(3):404–419, 2013.
- [10] Petr Cintula and Carles Noguera. The proof by cases property and its variants in structural consequence relations. *Studia Logica*, 101(4):713–747, 2013.
- [11] Karel Chvalovský and Petr Cintula. Note on deduction theorems in contraction-free logics. *Mathematical Logic Quarterly*, 58(3):236–343, 2012.
- [12] Petr Cintula and Petr Hájek. Triangular norm predicate fuzzy logics. *Fuzzy Sets and Systems*, 161(3):311–346, 2010.
- [13] Petr Cintula, Erich Peter Klement, Radko Mesiar, and Mirko Navara. Fuzzy logics with an additional involutive negation. *Fuzzy Sets and Systems*, 161(3):390–411, 2010.
- [14] Petr Cintula and George Metcalfe. Admissible rules in the implication–negation fragment of intuitionistic logic. *Annals of Pure and Applied Logic*, 162(2):162–171, 2010.
- [15] Petr Cintula and Carles Noguera. Implicational (semilinear) logics I: Basic notions and hierarchy. *Archive for Mathematical Logic*, 49(4):417–446, 2010.
- [16] Petr Cintula, Francesc Esteva, Joan Gispert, Lluís Godo, Franco Montagna, and Carles Noguera. Distinguished algebraic semantics for t-norm based fuzzy logics: Methods and algebraic equivalencies. *Annals of Pure and Applied Logic*, 160(1):53–81, 2009.
- [17] Petr Cintula and Petr Hájek. Complexity issues in axiomatic extensions of Łukasiewicz logic. *Journal of Logic and Computation*, 19(2):245–260, 2009.
- [18] Petr Cintula and George Metcalfe. Structural completeness in fuzzy logics. *Notre Dame Journal of Formal Logic*, 50(2):153–183, 2009.
- [19] Libor Běhounek, Ulrich Bodenhofer, and Petr Cintula. Relations in Fuzzy Class Theory: Initial steps. *Fuzzy Sets and Systems*, 159(14):1729–1772, 2008.
- [20] San-Min Wang and Petr Cintula. Logics with disjunction and proof by cases. *Archive for Mathematical Logic*, 47(5):435–446, 2008.

- [21] Petr Cintula, Petr Hájek, and Rostislav Horčík. Formal systems of fuzzy logic and their fragments. *Annals of Pure and Applied Logic*, 150(1–3):40–65, 2007.
- [22] Petr Cintula and George Metcalfe. Normal forms for fuzzy logics: A proof-theoretic approach. *Archive for Mathematical Logic*, 46(5–6):347–363, 2007.
- [23] Libor Běhounek and Petr Cintula. From fuzzy logic to fuzzy mathematics: A methodological manifesto. *Fuzzy Sets and Systems*, 157(5):642–646, 2006.
- [24] Libor Běhounek and Petr Cintula. Fuzzy logics as the logics of chains. *Fuzzy Sets and Systems*, 157(5):604–610, 2006.
- [25] Petr Cintula. Weakly implicative (fuzzy) logics I: Basic properties. *Archive for Mathematical Logic*, 45(6):673–704, 2006.
- [26] Petr Cintula, Erich Peter Klement, Radko Mesiar, and Mirko Navara. Residuated logics based on strict triangular norms with an involutive negation. *Mathematical Logic Quarterly*, 52(3):269–282, 2006.
- [27] Petr Hájek and Petr Cintula. On theories and models in fuzzy predicate logics. *Journal of Symbolic Logic*, 71(3):863–880, 2006.
- [28] Libor Běhounek and Petr Cintula. Fuzzy class theory. *Fuzzy Sets and Systems*, 154(1):34–55, 2005.
- [29] Petr Cintula. A note to the definition of the LII-algebras. *Soft Computing*, 9(8):575–578, 2005.
- [30] Petr Cintula. Short note: On the redundancy of axiom (A3) in BL and MTL. *Soft Computing*, 9(12):942–942, 2005.
- [31] Petr Cintula. Two notions of compactness in Gödel logics. *Studia Logica*, 81(1):99–123, 2005.
- [32] Petr Cintula and Brunella Gerla. Semi-normal forms and functional representation of product fuzzy logic. *Fuzzy Sets and Systems*, 143(1):89–110, 2004.
- [33] Petr Cintula and Mirko Navara. Compactness of fuzzy logics. *Fuzzy Sets and Systems*, 143(1):59–73, 2004.
- [34] Rostislav Horčík and Petr Cintula. Product Łukasiewicz logic. *Archive for Mathematical Logic*, 43(4):477–503, 2004.
- [35] Petr Cintula. Advances in the LII and LII $\frac{1}{2}$  logics. *Archive for Mathematical Logic*, 42(5):449–468, 2003.
- [36] Petr Cintula. About axiomatic systems of product fuzzy logic. *Soft Computing*, 5(3):243–244, 2001.
- [37] Petr Cintula. An alternative approach to the LII logic. *Neural Network World*, 11(6):561–572, 2001.
- [38] Petr Cintula. The LII and LII $\frac{1}{2}$  propositional and predicate logics. *Fuzzy Sets and Systems*, 124(3):289–302, 2001.

## Publications — conference proceedings papers

- [1] Petr Cintula, Carles Noguera, and Jonas Rogger. From kripke to neighborhood semantics for modal fuzzy logics. In Joao Paulo Carvalho, Marie-Jeanne Lesot, Uzay Kaymak, Susana Vieira, Bernadette Bouchon-Meunier, and Ronald R. Yager, editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems, Part II*, volume 611 of *Communications in Computer and Information Science*, pages 95–107. Springer, 2016.
- [2] Petr Cintula, Denisa Diaconescu, and George Metcalfe. Skolemization for substructural logics. In Martin Davis, Ansgar Fehner, Annabelle McIver, and Andrei Voronkov, editors, *Proceedings of LPAR-20*, Lecture Notes in Computer Science. Springer, 2015.
- [3] Petr Cintula and Carles Noguera. Modal logics of uncertainty with two-layer syntax: A general completeness theorem. In Ulrich Kohlenbach, Pablo Barceló, and Ruy J.G.B. de Queiroz, editors, *Logic, Language, Information, and Computation - WoLLIC 2014*, volume 8652, pages 124–136. Springer, 2014.
- [4] Petr Cintula and George Metcalfe. Herbrand theorems for substructural logics. In Kenneth L. McMillan, Aart Middeldorp, and Andrei Voronkov, editors, *Proceedings of LPAR-19*, volume 8312 of *Lecture Notes in Computer Science*, pages 584–600. Springer, 2013.
- [5] Martin Vítá and Petr Cintula. Filters in algebras of fuzzy logics. In Sylvie Galichet, Javier Montero, and Gilles Mauris, editors, *Proceedings of EUSFLAT 2011*, pages 169–174. Atlantis Press, 2011.
- [6] Libor Běhounek, Ulrich Bodenhofer, Petr Cintula, Susanne Saminger-Platz, and Peter Sarkoci. On a graded notion of t-norm and dominance. In *Proceedings of the ISMVL 2010*, pages 73–76. IEEE Computer Society, 2010.
- [7] Karel Chvalovský and Petr Cintula. Note on deduction theorems in contraction-free logics. In Andrei Voronkov, Geoff Sutcliffe, Matthias Baaz, and Christian G. Fermüller, editors, *Short papers for LPAR 2010*, volume 13 of *EPiC Series*, pages 26–29. EasyChair, 2010.
- [8] Petr Cintula and George Metcalfe. Complexity of admissible rules in the implication-negation fragment of intuitionistic logic. In Andrei Voronkov, Geoff Sutcliffe, Matthias Baaz, and Christian G. Fermüller, editors, *Short papers for LPAR 2010*, volume 13 of *EPiC Series*, pages 30–34. EasyChair, 2010.
- [9] Petr Cintula and Carles Noguera. An abstract approach to fuzzy logics: Implicational semilinear logics. In João Paulo Carvalho, Didier Dubois, Uzay Kaymak, and João Miguel da Costa Sousa, editors, *Proceedings of the Joint IFSA 2009 and EUSFLAT 2009 Conference*, pages 519–524, 2009.
- [10] Libor Běhounek, Ulrich Bodenhofer, and Petr Cintula. Valverde-style representation results in a graded framework. In Martin Štěpnička, Vilém Novák, and Ulrich Bodenhofer, editors, *New Dimensions in Fuzzy Logic and Related Technologies: Proceedings of EUSFLAT 2007*, volume I, pages 153–160, Ostrava, 2007. University of Ostrava.

- [11] Libor Běhounek and Petr Cintula. Features of mathematical theories in formal fuzzy logic. In Patricia Melin, Oscar Castillo, Lluís T. Aguilar, Janusz Kacprzyk, and Witold Pedrycz, editors, *Foundations of Fuzzy Logic and Soft Computing: Proceedings of IFSA 2007*, volume 4529, pages 523–532, Berlin etc., 2007. Springer.
- [12] Petr Cintula and Rostislav Horčík. Fuzzy Class Theory: Some advanced topics. In Martin Štěpnička, Vilém Novák, and Ulrich Bodenhofer, editors, *New Dimensions in Fuzzy Logic and Related Technologies: Proceedings of EUSFLAT 2007*, volume I, pages 137–144, Ostrava, 2007. University of Ostrava.
- [13] Libor Běhounek and Petr Cintula. Fuzzy class theory as foundations for fuzzy mathematics. In *Fuzzy Logic, Soft Computing and Computational Intelligence: Proceedings of IFSA 2005*, volume 2, pages 1233–1238, Beijing, 2005. Tsinghua University Press/Springer.
- [14] Libor Běhounek and Petr Cintula. General logical formalism for fuzzy mathematics: Methodology and apparatus. In *Fuzzy Logic, Soft Computing and Computational Intelligence: Proceedings of IFSA 2005*, volume 2, pages 1227–1232, Beijing, 2005. Tsinghua University Press/Springer.
- [15] Petr Cintula. Basics of a formal theory of fuzzy partitions. In Eduard Montseny and Pilar Sobrevilla, editors, *Proceedings of the Joint EUSFLAT 2005 and LFA 2005 Conference*, pages 884–888, Barcelona, 2005.
- [16] Rostislav Horčík and Petr Cintula. Extension of Łukasiewicz logic by product connective. In Taner Bilgiç, Bernard De Baets, and Okyay Kaynak, editors, *Fuzzy Sets and Systems: Proceedings of IFSA 2003*, volume 2715 of *Lecture Notes in Computer Science*, pages 180–188, 2003.