Curriculum vitae — Carles Noguera

Born: Barcelona, Catalonia (1978) **Homepage:** `http://www.carlesnoguera.cat`

Research interests: reasoning with graded notions, mathematical fuzzy logic, (abstract) algebraic logic, model theory

Education and qualification:

2012 Habilitation for a tenured professor position, National Agency for Quality Assessment and Accreditation of Spain
2011 Habilitation for a tenured professor position, Catalan Agency for University Quality
2007 Degree in Philosophy, University of Barcelona
2006 Ph.D. in Logic and Foundations of Mathematics, University of Barcelona
2001 Degree in Mathematics, University of Barcelona

Employment history:

2013–present Scientist at the Institute of Information Theory and Automation, Czech Academy of Sciences, Prague, Czech Republic
2009–2012 Postdoctoral researcher "Juan de la Cierva" at IIIA-CSIC, Bellaterra, Catalonia, Spain
2007–2009 Postdoctoral researcher "Beatriu de Pinós" at the Department of Mathematics and Computer Science, University of Siena, Italy
2006–2007 Lecturer at the Department of Computer Science and Industrial Engineering, University of Lleida, Catalonia, Spain
2002–2006 Ph.D. student at the Artificial Intelligence Research Institute (IIIA-CSIC), Bellaterra, Catalonia, Spain

Basic scientometric data (ResearcherID: C-7069-2013):

- 28 papers published (plus 2 submitted) in peer-reviewed journals, 46 contributions in conference proceedings, 2 monographs, and 4 chapters in books
- Citations: 388 (Web of Science), 424 (Scopus), 1106 (Google Scholar)
- H-index: 13 (Web of Science), 14 (Scopus), 18 (Google Scholar)
- 45 talks (4 of them invited) at conferences plus 31 additional presented by co-authors

Language skills

Catalan (native), English (fluent), Italian (fluent), Spanish (fluent), Czech (intermediate), French (elementary).

Awards

Featured paper at TACL09 conference (July 2009); Distinguished paper at 5th EUSFLAT conference (September 2007); Special prize for the Philosophy degree (June 2007); Prize Évariste Galois of the Catalan Mathematical Society (April 2005).

Funding ID

- Principal investigator of *Predicate graded logics and their applications to computer science*, Czech Science Foundation 17-04630S, 2017–2019.
- Principal investigator of *First-order many-valued logics*, Czech Academy of Sciences - CONICET Argentina, Bilateral Mobility Research Project, 2017–1018.

- Co-principal investigator of *Modeling vague quantifiers in mathematical fuzzy logic*, joint project of Austrian Science Fund I1897-N25 and Czech Science Foundation GF15-34650L, 2015–2018.
- Principal investigator of *An order-based approach to non-classical propositional and predicate logics*, Czech Science Foundation 13-14654S, 2013–2016.
- Personal grant *Mathematical fuzzy logic as a tool for reasoning with imperfect information* (2009 – 2012) "Juan de la Cierva" grant of the Spanish government (JCI-2009-05453).
- Personal grant *Algebraic and proof-theoretic methods for the formalization of reasoning with vagueness* (2007 – 2009) "Beatriu de Pinós" grant of the Catalan government (2006-BPA-10043).
- Member of 3 European projects:
  1. SYSMICS (2016 – 2019) *Syntax Meets Semantics: Methods, Interactions, and Connections in Substructural logics* (H2020-MSCA-RISE-2015).
  2. MaToMUVI (2011–2013) *Mathematical Tools for the Management of Uncertain and Vague Information* (PIRSES-GA-2009- 247584).
  3. LoMoReVI (2009–2011) *Logical Models of Reasoning with Vague Information* (EUROCORES Programme, FFI2008-03126-E/FILO).
- Member of 4 Spanish projects (2002 – 2012).

Teaching experience

- One master course to be taught at Czech Technical University in Prague: *Logic in Computer Science* (2018).
- Six master/bachelor courses at Charles University in Prague: *Introduction to Algebraic Logic* (2015, 2017), *General Theories of Logical Systems* (2014, 2016), *Mathematical Fuzzy Logic* (2013, 2016).
- One master course at the National University of Central Buenos Aires: *Introduction to Algebraic Logic* (2015).
- Two graduate courses at the University of Siena: *Mathematical Fuzzy Logic* (2008, 2009).
- Three undergraduate courses at the University of Lleida: *Computational logic* (2006) *Artificial intelligence* (2006), *Intelligent systems* (2007).
- One tutorial at the Israeli Workshop on Non-Classical Logics and Their Applications: *Mathematical Fuzzy Logic* (2014).
- One tutorial at the School of Universal Logic: *Logic, Algebra and Implication* (2013).
- Part of a master course in the Autonomous University of Barcelona: *Advanced Artificial Intelligence* (2013).
- Two courses at European Summer School in Logic, Language and Information (ESSLLI): *Abstract Algebraic Logic: theory and applications* (2012), *A gentle introduction to Mathematical Fuzzy Logic* (2014).

Master students

- Tomáš Lávička (Charles University in Prague). *Classification of (in)finitary logics*, 2015. (evaluation: Výborně).

Ph.D. students

- Tomáš Lávička (Charles University in Prague). *An implication-based approach to abstract algebraic logic*, (under preparation).

Invited lectures in international conferences

- *Logic and implication* (XIV Monteiro Congress, Bahía Blanca, Argentina, June 2017).
- *Non-associative substructural logics: alternative axiomatization, algebraic and logical properties* (15th Latin American Symposium on Mathematical Logic, Bogotá, Colombia, June 2012).
- *An abstract study of disjunction connectives in non-classical logics*, Argentinian Mathematical Society meeting 2011 (San Miguel de Tucumán, Argentina, September 2011).
- *From fuzzy sets to mathematical fuzzy logic* (Tenth International Conference on Fuzzy Set Theory and Applications FSTA 2010, Liptovský Jan, Slovakia, February 2010).

Research stays abroad (listing only those over one month)

- Department of Mathematics and Statistics, University of La Trobe, Melbourne, Australia (31 January – 31 March 2017).
- School of Computer Science and Applied Mathematics, University of Witwatersrand, Johannesburg, South Africa (11 July – 9 August 2016).
- National University of Central Buenos Aires, Tandil, Argentina (15 January – 14 March 2015).
- Centre for Logic, Epistemology and the History of Science, University of Campinas, Brazil (10 May – 9 June 2012).
- Department of Computer Science, University of Buenos Aires (Buenos Aires, Argentina, 26 July 2011 – 27 September 2011).
- Department of Mathematics and Computer Science, University of Siena (Siena, Italy, 17 May – 15 July 2005).
- Department of Computer Science and Mathematics, University of Salerno (Salerno, Italy, February – April 2004).

Additional professional activities

- frequent referee for peer-reviewed journals (over 100 different papers reviewed so far)
- member of the programme committee of 24 international conferences, member of the organizing committee of 9 conferences;
- coordinator of the ERCIM working on Many-valued logic (ManyVal)
- coordinator of the EUSFLAT working group of Mathematical Fuzzy Logic (MathFuzzLog)
- member of the steering committee of the series of conferences *Logic, Algebra and Truth Degrees*.
- member of the editorial board of *Journal of Multiple-Valued Logic and Soft Computing*.

LIST OF PUBLICATIONS

Edited volumes and special issues

1. Special issue on Mathematical Fuzzy Logic – in honor of Francesc Esteva, *Fuzzy Sets and Systems*, Volume 292, Pages 1-424, 2016. (edited by F. Bou, M. Cerami, À. García-Cerdaña, L. Godo, and C. Noguera)

2. *Handbook of Mathematical Fuzzy Logic – volume 3*, Studies in Logic, Mathematical Logic and Foundations, vol. 58, College Publications, London, 2015. (ISBN: 978-1-84890-193-3) (edited by P. Cintula, C. Fermüller and C. Noguera)

3. *Handbook of Mathematical Fuzzy Logic – volume 2*, Studies in Logic, Mathematical Logic and Foundations, vol. 38, College Publications, London, 2011. (ISBN: 978-1-84890-054-7) (edited by P. Cintula, P. Hájek and C. Noguera)

4. *Handbook of Mathematical Fuzzy Logic – volume 1*, Studies in Logic, Mathematical Logic and Foundations, vol. 37, College Publications, London, 2011. (ISBN: 978-1-84890-039-4) (edited by P. Cintula, P. Hájek and C. Noguera)

5. Special issue on Mathematical Fuzzy Logic, *Journal of Logic and Computation*, Volume 21, Issue 5, 2011. (edited by P. Cintula, G. Metcalfe and C. Noguera)

6. *Logic, Algebra and Truth Degrees 2010 – volume of abstracts*, Institute for Theoretical Computer Science Series, vol. 502, Prague, Czech Republic, 2010. (edited by K. Chvalovský, P. Cintula and C. Noguera)

Books

1. *Slabě implikativní logiky: Úvod do abstraktního studia výrokových logik*, Univerzita Karlova v Praze, Filozofická fakulta, Prague, 2015. (ISBN: 978-80-7308-576-6) (with P. Cintula)

2. *Algebraic study of axiomatic extensions of triangular norm based fuzzy logics*, Monographies of the Artificial Intelligence Research Institute vol. 27, Barcelona, 2007. (ISBN: 978-84-00-08538-4)

Chapters in books

1. The quest for the basic fuzzy logic, *Petr Hájek on Mathematical Fuzzy Logic*, chapter 12, F. Montagna (ed), Outstanding Contributions to Logic, vol. 6, Springer, 2014, pp. 245–290. (ISBN: 978-3-319-06232-7) (with P. Cintula and R. Horčík)

2. Arithmetical complexity of first-order fuzzy logics, *Handbook of Mathematical Fuzzy Logic – volume 2*, chapter XI, P. Cintula, P. Hájek, C. Noguera (eds), Studies in Logic, Mathematical Logic and Foundations, vol. 38, College Publications, London, 2011, pp. 853–908. (ISBN: 978-1-84890-054-7) (with P. Hájek and F. Montagna)

3. A general framework for Mathematical Fuzzy Logic, *Handbook of Mathematical Fuzzy Logic – volume 1*, chapter II, P. Cintula, P. Hájek, C. Noguera (eds), Studies in Logic, Mathematical Logic and Foundations, vol. 37, College Publications, London, 2011, pp. 103–207. (ISBN: 978-1-84890-039-4) (with P. Cintula)

4. On n-contractive fuzzy logics: first results, *Uncertainty and Intelligent Information Systems*, B. Bouchon-Meunier, R.R. Yager, C. Marsala, and M. Rifqi (eds), World Scientific, 2008, pp. 433–446. (ISBN: 978-981-279-234-1) (with F. Esteva and J. Gispert)

Encyclopedia entry:

1. Fuzzy logic, in *Stanford Encyclopedia of Philosophy*, 2016, `https://plato.stanford.edu/entries/logic-fuzzy/` (with P. Cintula and C. Fermüller)

Papers in peer-reviewed journals

1. Neighborhood semantics for modal many-valued logics. Submitted. (with P. Cintula)

2. Back-and-forth systems for first-order fuzzy logics. Submitted. (with P. Dellunde and À. García-Cerdaña)

3. Implicational (semiliear) logics III: completeness properties. To appear in *Archive for Mathematical Logic*. (with P. Cintula)

4. A new hierarchy of infinitary logics in abstract algebraic logic. *Studia Logica* 105 (2017) 521–551. (with T. Lávička)

5. Löwenheim–Skolem theorems for non-classical first-order algebraizable logics. *Logic Journal of the IGPL* 24 (2016) 321 – 345. (with P. Dellunde and À. García-Cerdaña)

6. Implicational (semilinear) logics II: additional connectives and characterizations of semilinearity. *Archive for Mathematical Logic* 55 (2016) 353–372. (with P. Cintula)

7. A note on natural extensions in abstract algebraic logic, *Studia Logica*, 103 (2015) 815–823. (with P. Cintula)

8. Paraconsistency properties in degree-preserving fuzzy logics, *Soft Computing – A Fusion of Foundations, Methodologies and Applications*, 19 (2015) 531–546. (with R. Ertola, F. Esteva, T. Flaminio and L. Godo)

9. A Henkin-style proof of completeness for first-order algebraizable logics, *The Journal of Symbolic Logic* 80 (2015) 341–358. (with P. Cintula)

10. Non-associative substructural logis and their semilinear extensions: axiomatization and completeness properties, *The Review of Symbolic Logic* 6 (2013) 794–423. (with P. Cintula and R. Horčík)

11. A logical approach to fuzzy truth hedges, *Information Sciences* 232 (2013) 366–385. (with F. Esteva and L. Godo)

12. The proof by cases property and its variants in structural consequence relations, Studia Logica 101 (2013) 713–747. (with P. Cintula)

13. Implicational (Semilinear) Logics I: A New Hierarchy, *Archive for Mathematical Logic* 49 (2010) 417–446. (with P. Cintula)

14. Arithmetical complexity of first-order predicate fuzzy logics over distinguished semantics, *Journal of Logic and Computation* 20 (2010) 399–424. (with F. Montagna)

15. Generalized continuous and left-continuous t-norms arising from algebraic semantics for fuzzy logics, *Information Sciences* 180 (2010) 1354–1372. (with F. Esteva and L. Godo)

16. Expanding the propositional logic of a t-norm with truth-constants: completeness results for rational semantics, *Soft Computing – A Fusion of Foundations, Methodologies and Applications* 14 (2010) 273–284. (with F. Esteva and L. Godo)

17. On expansions of WNM t-norm based logics with truth-constants, *Fuzzy Sets and Systems* 161 (2010) 347–368. (with F. Esteva and L. Godo)

18. First-order t-norm based fuzzy logics with truth-constants: distinguished semantics and completeness properties, *Annals of Pure and Applied Logic* 161 (2009) 185–202. (with F. Esteva and L. Godo)

19. Distinguished algebraic semantics for t-norm based fuzzy logics: methods and algebraic equivalencies, *Annals of Pure and Applied Logic* 160 (2009) 53–81. (with P. Cintula, F. Esteva, J. Gispert, L. Godo and F. Montagna)

20. A mathematical approach to the vagueness problem, Butlletí de la Societat Catalana de Matemàtiques 23 (2008) 233–273. (in Catalan)

21. On triangular norm based axiomatic extensions of the Weak Nilpotent Minimum logic, *Mathematical Logic Quarterly* 54 (2008) 387–409. (with F. Esteva and J. Gispert)

22. On completeness results for predicate Lukasiewicz, Product, Gödel, and Nilpotent Minimum logics expanded with truth-constants, *Mathware & Soft Computing* 14 (2007) 233–246. (with F. Esteva and L. Godo)

23. On n-contractive fuzzy logics, *Mathematical Logic Quarterly* 53 (2007) 268–288. (with R. Horčík and M. Petrík)

24. Adding truth-constants to logics of continuous t-norms: axiomatization and completeness results, *Fuzzy Sets and Systems* 158 (2007) 597-618. (with F. Esteva, J. Gispert and L. Godo)

25. On weakly cancellative fuzzy logics, *Journal of Logic and Computation* 16 (2006) 423–450. (with F. Montagna and R. Horčík)

26. On product logic with truth constants, *Journal of Logic and Computation* 16 (2006) 205–225. (with P. Savický, R. Cignoli, F. Esteva and L. Godo)

27. On Rational Weak Nilpotent Minimum Logics, *Journal of Multiple-valued Logic & Soft Computing* 12 (2006) 9–32. (with F. Esteva and L. Godo)

28. On some varieties of MTL-algebras, *Logic Journal of the IGPL* 13 (2005) 443–466. (with F. Esteva and J. Gispert)

29. Perfect and bipartite IMTL-algebras and disconnected rotations of prelinear semihoops, *Archive for Mathematical Logic* 44 (2005) 869–886. (with F. Esteva and J. Gispert)

30. On the scope of some formulas defining additive connectives in fuzzy logics, *Fuzzy Sets and Systems* 154 (2005) 56–75. (with À. García-Cerdaña and F. Esteva)

Contributions in conference proceedings

1. From Kripke to Neighborhood Semantics for Modal Fuzzy Logics. Information Processing and Management of Uncertainty, 16th International Conference, Eindhoven, The Netherlands, June 20 – 24, 2016, J.P. Carvalho, M.J. Lesot, U. Kaymak, S. Vieira, B. Bouchon–Meunier, R.R. Yager (eds), pp. 95 – 107, *Communications in Computer and Information Science*, Volume 611, Springer, 2016. (ISBN: 978-3-319-40580-3) (with P. Cintula and J. Rogger)

2. Back and forth conditions for elementary equivalence in model theory of non-classical logics, *ManyVal 2015: First-order and modal many-valued logics*, pp. 21 – 22, Les Diablerets, Switzerland, 2015. (with P. Dellunde and À. García-Cerdaña)

3. Completeness theorem for first-order algebraizable logics. *Congress on Logic, Methodology and Philosophy of Science & Logic Colloquium 2015 – Book of Abstracts*, pp. 681, Helsinki, Finland, 2015. (with P. Cintula)

4. Extending the set of variables in propositional logics. *Congress on Logic, Methodology and Philosophy of Science & Logic Colloquium 2015 – Book of Abstracts*, pp. 207, Helsinki, Finland, 2015. (with P. Cintula)

5. Dense completeness theorem for protoalgebraic logics, *Topology, Algebra, and Categories in Logic 2015 – Booklet of abstracts*, S. Boffa, A. Di Nola, A.R. Ferraioli, G. Lenzi, A.C. Russo, L. Spada, and G. Vitale (eds), pp. 55– 57, Ischia, Italy, 2015. (with P. Cintula)

6. Two-layer Modal Logics: Formalism and Applications, *29th International Symposium Logica 2015 – abstracts*, pp. 15, 2015. (with P. Cintula)

7. Beyond finitarity in abstract algebraic logic III: hierarchy and separating examples. *Applications of Logic in Philosophy and the Foundations of Mathematics*, pp. 20 – 21, K. Siemienczuk, B. Skowron, M. Selinger (eds), Wroclaw, Poland, 2015. (ISBN: 978-83-940690-0-1) (with T. Lávička)

8. Beyond finitarity in abstract algebraic logic II: from theory to applications. *Applications of Logic in Philosophy and the Foundations of Mathematics*, pp. 11 – 12, K. Siemienczuk, B. Skowron, M. Selinger (eds), Wroclaw, Poland, 2015. (ISBN: 978-83-940690-0-1) (with P. Cintula)

9. Beyond finitarity in abstract algebraic logic I: from motivation to a theory. *Applications of Logic in Philosophy and the Foundations of Mathematics*, pp. 9 – 10, K. Siemienczuk, B. Skowron, M. Selinger (eds), Wroclaw, Poland, 2015. (ISBN: 978-83-940690-0-1) (with P. Cintula)

10. Löwenheim–Skolem theorems for first-order algebraizable logics, *The Second Israeli Workshop on Non-Classical Logics and Their Applications – book of abstracts*, pp. 29–32, Haifa, Israel, 2014. (with P. Dellunde and À. García-Cerdaña)

11. Modal logics of uncertainty with two layer-syntax: a general completeness theorem. *Logic, Language, Information and Computation – 21st International Workshop, WoLLIC 2014*, Ulrich Kohlenbach, Pablo Barceló, Ruy de Queiroz (eds), Valparaiso, Chile, September 1-4, 2014, Lecture Notes in Computer Science, Springer, pp. 124–136. (ISBN: 978-3-662-44144-2) (with P. Cintula)

12. Advances on elementary equivalence in model theory of fuzzy logics, *Logic Colloquium and Logic, Algebra and Truth Degrees: Abstract Booklet*, Matthias Baaz, Agata Ciabattoni, Stefan Hetzl (eds), Kurt Gödel Society, Vienna, Austria, July 2014. (with P. Dellunde and À. García-Cerdaña)

13. Paraconsistent degree-preserving fuzzy logic, *Handbook of 5th World Congress on Paraconsistency*, Jean-Yves Béziau, Arthur Buchsbaum, Alvaro Altair (eds), Indian Statistical Institute, Calcutta, India, pp. 47–48. (ISBN: 978-93-83373-02-4) (with R. Ertola, F. Esteva, T. Flaminio and L. Godo)

14. Exploring paraconsistency in degree-preserving fuzzy logics, *Proceedings of the 8th conference of the European Society for Fuzzy Logic and Technology EUSFLAT 2013*, Gabriela Pasi, Javier Montero, Davide Ciucci (eds), Atlantis Press, pp. 117–124. (ISBN: 978-90786-77-78-9) (with R. Ertola, F. Esteva, T. Flaminio and L. Godo)

15. Two-layer modal logics: from fuzzy logics to a general framework, *Proceedings of 6th Topology, Algebra and Categories in Logic TACL 2013*, N. Galatos, A. Kurz and C. Tsinakis (eds), EPiC Series, vol. 123, pp. 43–47, Vanderbilt University, Nashville, Tennessee, USA, 2013.

16. On the role of disjunction in the theory of consequence relations. *27th International Symposium Logica 2013 – abstracts*, pp. 22–24, 2013. (with P. Cintula)

17. A note on the hierarchy of algebraizable logics, *Handbook of the 4th World Congress and School on Universal Logic*, pp. 356–357, J.Y. Béziau, A. Buchsbaum and A. Costa-Leite (eds), Rio de Janeiro, Brazil, 2013. (with P. Cintula)

18. On the scope of the completeness theorem for first-order predicate logic, *Handbook of the 4th World Congress and School on Universal Logic*, pp. 223, J.Y. Béziau, A. Buchsbaum and A. Costa-Leite (eds), Rio de Janeiro, Brazil, 2013. (with P. Cintula)

19. A basic fuzzy logic which is really basic and fuzzy, *Logic, Algebra and Truth Degrees 2012 – Book of abstracts*, pp. 67–70, K. Terui and N. Preining (eds), Japan Advanced Institute of Science and Technology, Kanazawa, Japan, 2012. (with P. Cintula and R. Horčík)

20. Semilinear non-associative substructural logics: completeness properties and complexity, *15th Latin American Symposium on Mathematical Logic 2012*, Bogotá, Colombia, The Bulletin of Symbolic Logic 19 (2013) 409–410. (with P. Cintula, Z. Haniková, and R. Horčík)

21. Non-associative substructural logics: alternative axiomatization, algebraic and logical properties, *15th Latin American Symposium on Mathematical Logic 2012*, Bogotá, Colombia, The Bulletin of Symbolic Logic 19 (2013) 418. (with P. Cintula, Z. Haniková, and R. Horčík)

22. Almost (MP)-based logics, Twelfth Asian Logic Conference 2011, Wellington, New Zealand, *The Bulletin of Symbolic Logic* 19 (2013) 274. (with P. Cintula)

23. Generalized disjunction connectives in (infinitary) structural consequence relations, Logic Colloquium 2011, Barcelona, *The Bulletin of Symbolic Logic 18* (2012) 442–443. (with P. Cintula)

24. An abstract study of disjunction connectives in non-classical logics, *Reunión de la Unión Matemática Argentina, UMA 2011 – Libro de resúmenes*, pp. 142–143, San Miguel de Tucumán, Argentina, 2011. (with P. Cintula)

25. Almost (MP)-based substructural logics, *Fifth International Conference on Topology, Algebra, and Categories in Logic*, pp. 71–74, L. Santocanale, N. Olivetti, Y. Lafont (eds), Marseilles, France, 2011. (with P. Cintula)

26. Fuzzy logics with truth hedges revisited, *Proceedings of the 7th conference of the European Society for Fuzzy Logic and Technology (EUSFLAT-2011) and LFA-2011*, Advances in Intelligent Systems Research, pp. 146–152, Sylvie Galichet, Javier Montero, Gilles Mauris (eds), Atlantis Press, 2011. (ISBN: 978-90-78677-00-0) (with F. Esteva and L. Godo)

27. (Non-associative) Substructural Fuzzy Logics, *Algebraic Semantics for Uncertainty and Vagueness – Booklet of abstracts*, pp. 31–37, University of Salerno, Salerno, Italy, 2011. (with P. Cintula)

28. Implicational logics vs. order algebraizable logics, *Logic, Algebra and Truth Degrees 2010 – volume of abstracts*, pp. 72–73, K. Chvalovský, P. Cintula, C. Noguera (eds), Institute for Theoretical Computer Science Series, vol. 502, Prague, 2010. (with P. Cintula)

29. A general approach to non-classical first-order logics, *3rd World Congress and School on Universal Logic UniLog 2010 – Book of Abstracts*, pp. 11–12, J.Y. Béziau, C. Caleiro, A. Costa-Leite, J. Ramos (eds), Instituto Superior Técnico – Departamento de Matemática, Indústria Portuguesa de Tipografia Lda, Lisboa, 2010 (ISBN: 978-972-99289-2-5). (with P. Cintula)

30. Logics with a (lattice) disjunction and their completeness properties, *Proceedings of the 31st Linz Seminar on Fuzzy Set Theory "Lattice-Valued Logic and its Application"*, pp. 26–30, P. Cintula, E.P. Klement, L. Stout (eds), Universitätsdirektion, Johannes Kepler Universität, A-4040 Linz, 2010. (with P. Cintula)

31. From fuzzy set theory to mathematical fuzzy logic, *Proceedings of the Tenth International Conference on Fuzzy Set Theory and Applications FSTA 2010*, p. 12, E.P. Klement, R. Mesiar, P. Struk, E. Drobná (eds), Printing House of the Armed Forces Academy of General M.R. Stefánik in Liptovský Mikulás, Slovakia, 2010. (ISBN: 978-80-8040-391-1)

32. An abstract approach to fuzzy logics: implicational semilinear logics, *Proceedings of the Joint 2009 International Fuzzy Systems Association World Congress and 2009 European Society of Fuzzy Logic and Technology Conference*, pp. 519–524, J.P. Carvalho, D. Dubois, U. Kaymak, J.M. Da Costa Sousa (eds), Lisbon, Portugal, 2009. (ISBN: 978-989-95079-6-8) (with P. Cintula)

33. On generalized continuous and left-continuous t-norms over chains: a survey, *Proceedings of the 30th Linz Seminar on Fuzzy Set Theory "The legacy of 30 seminars – where do we stand and where do we go?"*, pp. 40–41, U. Bodenhofer, B. de Baets, E.P. Klement, S. Saminger-Platz (eds), Universitätsdirektion, Johannes Kepler Universität, A-4040 Linz, 2009. (with F. Esteva and L. Godo)

34. Rational completeness results for prominent propositional fuzzy logics with truth-constants, *Actas del XIV congreso español sobre tecnologías y lógica fuzzy ESTYLF 2008*, pp. 133–139, Mieres, 2008. (ISBN: 978-84-691-5807-4) (with F. Esteva and L. Godo)

35. Hierarchies of definable disjunctions and implications in non-classical logics, *Volume of Abstracts of the Sixth European Conference on Analytical Philosophy*, p. 98, V. Kukushkina, K. Kijania-Placek (eds), Krakow, 2008. (with P. Cintula)

36. On completeness results for the expansions with truth-constants of some predicate fuzzy logics, *New dimensions in fuzzy logic and related technologies - Proceedings of Fifth EUSFLAT*, Volume II, pp. 21–26, M. Stepnicka, V. Novák, U. Bodenhofer (eds), Universitas Ostraviensis, 2007. (ISBN: 978-80-7368-387-0) (with F. Esteva and L. Godo)

37. Real, rational and finite chain semantics for fuzzy logics, *Actas del XIII congreso español sobre tecnologías y lógica fuzzy ESTYLF 2006*, pp. 83–88, Ciudad Real, 2006. (ISBN: 84-689-9547-9) (with F. Esteva and L. Godo)

38. Real, rational and finite chain semantics for fuzzy logics, *The Logic of Soft Computing Workshop VI & Workshop of the ERCIM working group on Soft Computing*, pp. 44–48, S. Gottwald, P. Hájek, M. Ojeda-Aciego (eds), Universidad de Málaga, 2006. (with F. Esteva and L. Godo)

39. On n-contractive fuzzy logics: first results, *Eleventh international conference IPMU 2006, Information processing and management of uncertainty in knowledge-based systems*, pp. 1612–1619, Paris, 2006. (ISBN : 2-84254-112-X) (with F. Esteva and J. Gispert)

40. On weakly cancellative fuzzy logics, *Proceedings of The Logic of Soft Computing IV & 4th Workshop of the ERCIM Working Group on Soft Computing*, pp. 59–61, V. Novák, M. Stepnicka (eds), Research report No. 77, Institute for Research and Applications of Fuzzy Modeling, University of Ostrava, Ostrava, Czech Republic, 2005. (with F. Montagna and R. Horčík)

41. On varieties generated by Weak Nilpotent Minimum t-norms, *Proceedings of Fourth EUSFLAT*, pp. 866–871, Barcelona, 2005. (ISBN: 84-7653-872-3) (with F. Esteva and J. Gispert)

42. On product fuzzy logic with truth-constants, *Proceedings of the Eleventh International Fuzzy Systems Association World Congress IFSA 2005*, vol. 2, pp. 1244–1249, Yingming Liu, Guoqing Chen, Mingsheng Ying (eds), Tsinghua University Press, Springer, 2005. (ISBN: 7-302-11377) (with R. Cignoli, F. Esteva and L. Godo)

43. On Rational Weak Nilpotent Minimum Logics, *Actas del XII congreso español sobre tecnologías y lógica fuzzy ESTYLF 2004*, pp. 413–418, Universidad de Jaén, 2004. (ISBN: 84-609-2160-3) (with F. Esteva and L. Godo)

44. On Rational Gödel and Nilpotent Minimum Logics, *Tenth international conference IPMU 2004, Information processing and management of uncertainty in knowledge-based systems*, vol. 1, pp. 561–568, Casa editrice Università La Sapienza, Perugia, 2004. (ISBN: 88-87242-54-2) (with F. Esteva and L. Godo)

45. On definability of additive connectives in fuzzy logics, *Tenth international conference IPMU 2004, Information processing and management of uncertainty in knowledge-based systems*, vol. 1, pp. 485–492, Casa editrice Università La Sapienza, Perugia, 2004. (ISBN: 88-87242-54-2) (with À. García-Cerdaña and F. Esteva)

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