

CURRICULUM VITAE

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Name: Carles Noguera i Clofent

E-mail address: carles.noguera.clofent@gmail.com

URL: www.carlesnoguera.cat

Born in Barcelona (Catalan Countries), 15th December 1978.

EDUCATION:

Ph.D. in Logic and Foundations of Mathematics at the University of Barcelona with the dissertation: *Algebraic study of axiomatic extensions of triangular norm based fuzzy logics* (July 2006)

Advisors: Francesc Esteva (IIIA – CSIC) and Joan Gispert (University of Barcelona)

External referees: Siegfried Gottwald and Franco Montagna.

Committee: Antoni Torrens (chair), Ramon Jansana, Franco Montagna, Ventura Verdú and Lluís Godo.

Evaluation: “Excellent Cum Laude” (by unanimity)

Master Degree in Logic and Foundations of Mathematics at the University of Barcelona with the dissertations: *T-norms and Fuzzy Logic* and *Involutive Fuzzy Logics* (October 2004)

Committee: Juan Carlos Martínez Alonso (chair), Enrique Casanovas and Raimon Elgueta.

Evaluation: Excellent.

Degree in Philosophy at the University of Barcelona (June 2007)

Degree in Mathematics at the University of Barcelona (June 2001)

Academic assessments:

- Accreditation for a tenured assistant professor position (issued on 2012 by the National Agency for Quality Assessment and Accreditation of Spain)
- Accreditation for a tenured assistant professor position (issued on 2011 by the Catalan Agency for University Quality)
- Accreditation for a tenure-track lecturer position (issued on 2007 by the Catalan Agency for University Quality)

EMPLOYMENT HISTORY:

Since January 2013: Researcher at the Institute of Information Theory and Automation, Academy of Sciences of the Czech Republic, Prague, Czech Republic.

December 2012: Visiting researcher at the Institute of Computer Science, Academy of Sciences of the Czech Republic, Prague, Czech Republic.

December 2009 – November 2012: Postdoctoral researcher “Juan de la Cierva” at the Artificial Intelligence Research Institute (IIIA – CSIC), Bellaterra, Catalonia.

October 2009 – November 2009: Visiting postdoctoral researcher at Institute of Philosophy / Institute of Computer Science, Academy of Sciences of the Czech Republic, Prague, Czech Republic.

October 2007 – October 2009: Postdoctoral researcher “Beatriu de Pinós” at the Department of Mathematics and Computer Science R. Magari, University of Siena, Siena, Italy.

September 2006 – September 2007: Lecturer at the Department of Computer Science and Industrial Engineering. University of Lleida, Lleida, Catalonia. External collaborator of the Artificial Intelligence Research Institute (IIIA - CSIC).

July 2002 – September 2006: Ph.D. student with an FPI fellowship at the Artificial Intelligence Research Institute (IIIA – CSIC), Bellaterra, Catalonia.

September 2000 – June 2002: Science teacher, Academy "L'Estudi", Calella, Catalonia.

LANGUAGE SKILLS:

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

TEACHING CV:

Academic year 2015/2016:

One course at the Master in Logic of Charles University in Prague:

- *Introduction to Algebraic Logic* (first semester) (24 hours)

Academic year 2014/2015:

One course at the Degree in Mathematics of National University of Central Buenos Aires, Tandil, Argentina:

- *Introduction to Algebraic Logic* (40 hours)

Tutorial at the Israeli Workshop on Non-Classical Logics and Their Applications (Haifa, Israel, 29 September – 1 October 2014) (with P. Cintula):

- *Mathematical Fuzzy Logic: How you can easily set up your own fuzzy logic*

Academic year 2013/2014:

Two courses at the Master in Logic of Charles University in Prague (with P. Cintula):

- *Mathematical fuzzy logic* (first semester) (taught 10 hours out of 20)
- *General theories of logical systems* (second semester) (taught 22 hours out of 24)

Introductory course at the European Summer School in Logic, Language and Information (ESSLLI) (Tübingen, Germany, August 2014) (with P. Cintula):

- *A gentle introduction to mathematical fuzzy logic* (taught 3 hours out of 7.5)

Academic year 2012/2013:

Course in the Master in Computer Vision and Artificial Intelligence of the Autonomous University of Barcelona (course coordinator: Josep Puyol):

- *Advanced Artificial Intelligence* (taught 8 hours out of 36)

Tutorial at the School of Universal Logic (Rio de Janeiro, Brazil, 29 March – 2 April 2013) (with P. Cintula):

- *Logic, Algebra and Implication* (taught 2 hours out of 3.75)

Academic year 2011/2012:

Advanced course at the European Summer School in Logic, Language and Information (ESSLLI) (Opole, Poland, August 2012) (with P. Cintula):

- *Abstract Algebraic Logic: theory and applications* (taught 4 hours out of 7.5)

Academic year 2008/2009:

Ph.D. course taught at the Department of Mathematics and Computer Science of the University of Siena (with T. Flaminio):

- *Mathematical fuzzy logic* (second semester) (taught 8 hours out of 16)

Seminar taught at the Ph.D. Students' Seminar of the Faculty of Arts and Philosophy of Charles University Prague (23 February 2009):

- *Abstract Algebraic Logic: an introduction* (2 hours)

Academic year 2007/2008:

Ph.D. course taught at the Department of Mathematics and Computer Science of the University of Siena (with T. Flaminio):

- *Mathematical fuzzy logic* (second semester) (taught 8 hours out of 16)

Academic year 2006/2007:

Three undergraduate courses taught at the Department of Computer Science and Industrial Engineering of the University of Lleida:

- *Computational logic* (first semester) (50 hours)
- *Artificial intelligence* (first semester) (60 hours)
- *Intelligent systems* (second semester) (60 hours)

Academic year 2003/2004:

Seminar taught at the Ph.D. Students' Seminar of the Faculty of Arts and Philosophy of Charles University Prague (23 October 2003):

- *Introduction to Abstract Algebraic Logic* (2 hours)

Advisor of Master theses:

- Tomáš Lavička, *Classification of (in)finite logics*, Charles University in Prague, 2015 (evaluation: Výborně, excellent).

Advisor of Ph.D theses:

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

Member of the evaluation committee of the Ph.D. theses:

- Àngel García-Cerdaña, *Triangular norm based logics: a contribution to the study of their substructural aspects*, University of Barcelona, 2007. (alternate member)
- Marco Cerami, *Fuzzy Description Logics from a Mathematical Fuzzy Logic point of view*, University of Barcelona, 2012. (alternate member)
- Amanda Vidal, *On modal expansions of t-norm based logics with rational constants*, University of Barcelona, 2015. (alternate member)

RESEARCH CV:

Research interests:

Mathematical Fuzzy Logic
 Substructural and many-valued logics
 (Abstract) Algebraic Logic
 Non-classical logics for Artificial Intelligence

Participation in funded research projects:

- SYSMICS (2016 – 2019). Syntax Meets Semantics: Methods, Interactions, and Connections in Substructural logics. H2020-MSCA-RISE-2015 project. Code: . Principal investigator: Luca Spada.
- Modeling vague quantifiers in mathematical fuzzy logic (2015 – 2017). Funded by the Czech Science Foundation (GACR) and the Austrian Science Fund (FWF). Principal investigator: Chris Fermüller.
- An order-based approach to non-classical propositional and predicate logics (2013 – 2016). Funded by the Czech Science Foundation (GACR). Principal investigator: Carles Noguera.
- Mathematical Fuzzy Logic in Computer Science (2013 – 2014). Funded by the Czech Science Foundation (GACR). Code: P202/10/1826. Principal investigator: Petr Cintula.
- MaToMUVI (2011 – 2015). Mathematical Tools for the Management of Uncertain and Vague Information. FP7-PEOPLE-2009-IRSES project. Code: PIRSES-GA-2009- 247584. Principal investigator: Luca Spada.
- TASSAT (2011 – 2013). Theories, applications and synergy in SAT, Constraint Satisfaction Problem and Fuzzy Description Logics. Code: TIN2010-20967-C04-01. Principal investigator: Jordi Levy.
- LoMoReVI (2009 – 2011). Logical Models of Reasoning with Vague Information. EUROCORES Programme. Code: FFI2008-03126-E/FILO. Principal investigator: Lluís Godo.
- MULONG 2 (2008 – 2010). Multivalued logic: foundations and applications to satisfiability, argumentation and ontologies. Code: TIN2007-68005-C04-01. Principal investigator: Francesc Esteva.
- MULONG (2005 – 2007). Multivalued logic: foundations and applications to the treatment of vagueness and imprecision. Code: CICYT, TIN2004-07933-C03-01. Principal investigator: Francesc Esteva.

- LOGFAC (2002 – 2004). Classical and multivalued logic: foundations and computational applications. Code: CICYT TIC2001-1577-C03-01. Principal investigator: Francesc Esteva.

Participation in funded bilateral collaboration programs:

- CSIC – Academy of Sciences of the Czech Republic bilateral project 2008CZ0015 for collaboration between IIIA and Institute of Computer Science (2009 – 2010). Title: Fuzzy logics and modalities. Principal investigator: Francesc Esteva.
- Spanish – Austrian bilateral project HU2005-0024 (2006 – 2007). Title: Analytic Systems and Dialogue Games as Semantics of Fuzzy Logics. Principal investigator: Àngel Gil.
- CSIC – Academy of Sciences of the Czech Republic bilateral project 2004CZ0015 for collaboration between IIIA and Institute of Computer Science (2005 – 2006). Title: Theoretical investigations of fuzzy logic systems in the framework of substructural logics. Principal investigator: Francesc Esteva.
- Spanish – Austrian bilateral project HU2003-0043 (2004 – 2005). Title: Monadic Fuzzy Logics. Principal investigator: Francesc Esteva.
- CSIC – Academy of Sciences of the Czech Republic bilateral project 2003CZ0001 for collaboration between IIIA and Institute of Computer Science (2003 – 2004). Title: Theoretical foundations of managing uncertainty in KBS. Principal investigator: Francesc Esteva.
- Spanish – Austrian bilateral project HU2001-0030 (2002 – 2003). Title: T-norms formalized: proof theory and semantics of fuzzy logics. Principal investigator: Francesc Esteva.

Awards and honours:

- Beatriu de Pinós fellowship (October 2012)
- Featured paper at TACL09 conference (July 2009)
- Distinguished paper at the 5th EUSFLAT conference (September 2007)
- Special prize for the Philosophy degree (June 2007)
- Prize Évariste Galois of the Catalan Mathematical Society (April 2005)

Organization of conferences and workshops:

- Second Prague Symposium on Semilinear Logics (Prague, 20 November 2013)
- ManyVal 2013: Games, decisions and rationality (Prague, September 2013)
- Third meeting on Artificial Intelligence and Quality of Life (Barcelona, 1 December 2012)
- Second meeting on Artificial Intelligence and Quality of Life (Barcelona, 26 November 2011)
- International Workshop on Mathematical Fuzzy Logic and Soft Computing (Barcelona, November 2008)
- Logic, Algebra and Truth Degrees 2008 (Siena, September 2008)
- Algebraic and topological methods in non-classical logics II (Barcelona, June 2005)
- Second Workshop on the Foundations of Mathematics (Barcelona, July 2003)
- First Workshop on the Foundations of Mathematics (Barcelona, July 2002)

Organization of special sessions and workshops inside conferences:

- Workshop on Algebraic Logic in Computer Science in the 19th International Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR 2013) (Stellenbosch, South Africa, 14 – 19 December 2013)
- Workshop on Many-valued Logics in World Congress on Universal Logic (Rio de Janeiro, Brazil, 3 – 7 April 2013)
- Special session on Mathematical Fuzzy Logic in EUSFLAT 2011 (Aix-Les-Bains, July 2011)
- Special session on Mathematical Fuzzy Logic in FSTA 2010 (Liptovský Jan, Slovakia, February 2010)
- Special session on Mathematical Fuzzy Logic in IFSA-EUSFLAT 2009 (Lisbon, July 2009)

Member of the steering committee of the series of conferences *Logic, Algebra and Truth Degrees* (since 2012)

Member of the program committee of the conferences:

- ManyVal 2015 (Les Diablerets, Switzerland, 11-13 December 2015)
- 18th International Conference of the Catalan Association for Artificial Intelligence CCIA 2015 (València, 22-24 October 2015)
- 9th Conference of the European Society for Fuzzy Logic and Technology EUSFLAT 2015 (Oviedo, Spain, September 2015)
- Doctoral Symposium on Recent Advances in Information Technology 2015 (FedCSIS 2015, Lodz, Poland, September 2015)
- 29th International Symposium Logica 2015 (Hejnice, Czech Republic, June 2015)
- Doctoral Symposium on Recent Advances in Information Technology 2014 (FedCSIS 2014, Warsaw, Poland, September 2014)
- 28th International Symposium Logica 2014 (Hejnice, Czech Republic, June 2014)
- Doctoral Symposium on Recent Advances in Information Technology 2013 (FedCSIS 2013, Krakow, Poland, September 2013)
- 8th Conference of the European Society for Fuzzy Logic and Technology EUSFLAT 2013 (Milan, Italy, September 2013)
- Logic, Algebra and Truth Degrees 2012 (Kanazawa, Japan, September 2012)
- 7th Conference of the European Society for Fuzzy Logic and Technology EUSFLAT 2011 (Aix-Les-Bains, France, July 2011)
- Logic, Algebra and Truth Degrees 2010 (Prague, Czech Republic, September 2010)
- Information processing and management of uncertainty in knowledge-based systems IPMU 2010 (Dortmund, Germany, June 2010)
- IEEE International Symposium on Multiple-Valued Logic 2010 (Barcelona, May 2010)

Invited lectures in international conferences:

From fuzzy sets to mathematical fuzzy logic (Tenth International Conference on Fuzzy Set Theory and Applications FSTA 2010, Liptovský Jan, Slovakia, 2 February 2010).

An abstract study of disjunction connectives in non-classical logics, Argentinian Mathematical Society meeting 2011 (San Miguel de Tucumán, Argentina, 20 – 23 September 2011).

Non-associative substructural logics: alternative axiomatization, algebraic and logical properties (15th Latin American Symposium on Mathematical Logic, Bogotá, Colombia, 4 June 2012).

Invited lectures in workshops and seminars:

Philosophy of constructive mathematics (First Workshop on the Foundations of Mathematics, Barcelona, July 2002).

The Algebraization of Linear and Fuzzy Logics (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 29 October 2003).

MTL and IMTL (Seminar of the Soft Computing Laboratory, Department of Informatics and Mathematics, University of Salerno, 17 February 2004).

On the scope of some definitions of the additive connectives in fuzzy logics (Seminar on Non-Classical Logics, University of Barcelona, 30 April 2004).

Perfect and bipartite algebras in IMTL and in MTL (Seminar on Non-Classical Logics, University of Barcelona, 22 October 2004).

Perfect and bipartite algebras in IMTL and in MTL (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 3 November 2004).

On n -contractive fuzzy logics: first results (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 12 October 2005).

On weakly cancellative fuzzy logics (Seminar on Non-Classical Logics, University of Barcelona, 21 and 28 October 2005).

On n -contractive fuzzy logics (Institute für Algebra und Computermathematik, Technische Universität Wien, Austria, 23 November 2005).

The algebraic approach to Fuzzy Logic (Second Czech-Catalan Conference in Mathematics, Barcelona, September 2006).

On n -contractive fuzzy logics (Seminar on Non-Classical Logics, University of Barcelona, 10 April 2007).

On completeness results for the expansions with truth-constants of propositional and first-order Weak Nilpotent Minimum logics (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 5

December 2007).

Expanding Leibniz hierarchy: implicational (semilinear) logics, (Seminar on Non-Classical Logics, University of Barcelona, 28 October 2008).

What is a fuzzy logic? (First meeting of the “Logical Models of Reasoning with Vague Information” project, IIIA – CSIC, Barcelona, 5 November 2008).

Studying logics around MTL (International Workshop on Mathematical Fuzzy Logic and Soft Computing, Barcelona, November 2008).

Arithmetical complexity of fuzzy logics over distinguished semantics (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 11 February 2009).

Expanding Leibniz hierarchy: implicational (semilinear) logics (Prague international seminar on semilinear logics, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 24 February 2009).

A general theory of logics with implication (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 11 and 18 November 2009).

First-order fuzzy logics: an introduction (Seminar on Non-Classical Logics, University of Barcelona, 19 and 26 March 2010).

General results on arithmetical complexity of first-order fuzzy logics (Workshop on fuzzy logics and non-classical logics, Research Institute for Mathematical Sciences, Kyoto University, Kyoto, Japan, 14 June 2010).

An introduction to Mathematical Fuzzy Logic (Institute of Applied Mathematics of Litoral IMAL – CONICET, Santa Fe, Argentina, 29 July 2011).

Fuzzy logics with hedges (Department of Computer Science, University of Buenos Aires, Argentina, 11 August 2011).

Deduction theorems and disjunctions in substructural logics (Department of Mathematics, National University of the South, Bahía Blanca, Argentina, 16 August 2011).

An introduction to Mathematical Fuzzy Logic (National University of Central Buenos Aires, Tandil, Argentina, 19 September 2011).

Deduction theorem and proof by cases property in substructural logics (Seminar on Non-Classical Logics, University of Barcelona, 15 December 2011).

A general framework for substructural logics with applications (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 7 March 2012).

Non-associative substructural logics and a really basic fuzzy logic (Seminar on Non-Classical Logics, University of Barcelona, 3 May 2012).

Mathematical Fuzzy Logic: origins and development (Logic Colloquium Seminar of the Centre for Logic, Epistemology and the History of Science, University of Campinas, Brazil, 23 May 2012).

Exploring paraconsistency in fuzzy logics (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 12 December 2012).

Presentation of the Handbook of Mathematical Fuzzy Logic (A gathering of Prague-based logicians, Prague, Czech Republic, 16 February 2013).

The importance of disjunction in classical and non-classical logics (University of Bern, Switzerland, 25 June 2013).

The quest for the basic fuzzy logic (VRSR, Trojanovice, Czech Republic, 26 October 2013).

A logical to fuzzy truth hedges (Department of Computer Science, Palacky University of Olomouc, Olomouc, Czech Republic, 16 January 2014).

Two-layer modal logics: from fuzzy logics to a general framework (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 12 March 2014).

Modal logics of uncertainty with two layer-syntax: a general completeness theorem (Seminar on Non-Classical Logics, University of Barcelona, 28 May 2014).

Disjunction and distributivity (but not those you would expect) Spring seminar of the Department of Logic of Charles University (Dvoračky, Czech Republic, 30 – 31 May 2014)

Logics with (semilinear) implication revisited (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 29 October 2014).

Löwenheim-Skolem theorems for non-classical first-order algebraizable logics (Seminar of Applied Mathematical Logic, Institute of Computer Science of the Academy of Sciences of the Czech Republic, 20 May 2015).

Neighborhood semantics for modal fuzzy logics (Meeting of the project MoVaQ, Institute für Algebra und Computermathematik, Technische Universität Wien, Austria, 5 October 2015).

Invited participation in round tables:

Many-valued logics and mathematical fuzzy logics in Linz Seminar 2009 (Linz,

Austria, 3 – 7 February 2009).

Contributed talks:

On definability of maximum in left-continuous t-norms, 3rd EUSFLAT (Zittau, Germany, September 2003) (joint work with F. Esteva and À. García-Cerdaña)

On Rational Gödel and Nilpotent Minimum Logics, Residuated Structures and Many-valued Logics (Patras, Greece, June 2004) (joint work with F. Esteva and L. Godo)*

Perfect and Bipartite IMTL-algebras and Disconnected Rotations of Basic Semihoops, Residuated Structures and Many-valued Logics (Patras, Greece, June 2004) (joint work with F. Esteva and J. Gispert)

On definability of additive connectives in fuzzy logics, IPMU 2004 (Perugia, Italy, July 2004) (joint work with F. Esteva and À. García-Cerdaña)

On Rational Gödel and Nilpotent Minimum Logics, IPMU 2004 (Perugia, Italy, July 2004) (joint work with F. Esteva and L. Godo)*

On Rational Weak Nilpotent Minimum Logics, ESTYLF 2004 (Jaén, Spain, September 2004) (joint work with F. Esteva and L. Godo)*

Recent advances in MTL and IMTL, The Logic of Soft Computing Workshop III, (Vienna, Austria, 2004) (joint work with F. Esteva and J. Gispert)*

On the variety of WNM-algebras, Algebraic and topological methods in non-classical logics II (Barcelona, June 2005) (joint work with F. Esteva and J. Gispert)

On product logic with truth-constants, Algebraic and topological methods in non-classical logics II (Barcelona, June 2005) (joint work with R. Cignoli, F. Esteva, L. Godo and P. Savicky)*

On varieties generated by Weak Nilpotent Minimum t-norms, 4th EUSFLAT (Barcelona, September 2005) (joint work with F. Esteva and J. Gispert)

On weakly cancellative fuzzy logics, The Logic of Soft Computing IV (Ostrava, Czech Republic, October 2005) (joint work with R. Horčík and F. Montagna)

Real, rational and finite-chain semantics for t-norm based logics: methods and algebraic equivalences, Ordered Structures in Many-valued Logic (Massa Lubrense, Italy, June 2006) (joint work with P. Cintula, F. Esteva, J. Gispert, L. Godo)

On n-contractive fuzzy logics: first results, IPMU 2006 (Paris, France, July 2006) (joint work with F. Esteva and J. Gispert)

Real, rational and finite chain semantics for fuzzy logics, The Logic of Soft Computing V (Málaga, Spain, September 2006) (joint work with F. Esteva and L. Godo)*

Real, rational and finite chain semantics for fuzzy logics, ESTYLF 2006 (Ciudad Real, Spain, September 2006) (joint work with F. Esteva and L. Godo)*

Algebraic characterization of completeness properties for core fuzzy logics I: propositional logics, Order, Algebra and Logic (Nashville, USA, June 2007) (joint work with P. Cintula, F. Esteva, J. Gispert, L. Godo and F. Montagna)

Algebraic characterization of completeness properties for core fuzzy logics II: predicate logics, Order, Algebra and Logic (Nashville, USA, June 2007) (joint work with P. Cintula, F. Esteva, J. Gispert, L. Godo and F. Montagna)*

On completeness results for the expansions with truth-constants of some predicate fuzzy logics, 5th EUSFLAT (Ostrava, Czech Republic, September 2007) (joint work with F. Esteva and L. Godo)

On real and rational completeness of some predicate fuzzy logics with truth-constants, Residuated Structures: Algebra and Logic (Buenos Aires, Argentina, April 2008) (joint work with F. Esteva and L. Godo)*

Implications and fuzzy logics, Residuated Structures: Algebra and Logic (Buenos Aires, Argentina, April 2008) (joint work with P. Cintula)*

A hierarchy of (fuzzy) implicational logics, 22nd International Symposium Logica 2008 (Hejnice, Czech Republic, June 2008) (joint work with P. Cintula)

Hierarchies of definable disjunctions and implications in non-classical logics, Sixth European Conference on Analytical Philosophy (Krakow, Poland, August 2008) (joint work with P. Cintula)

Rational completeness results for prominent propositional fuzzy logics with truth-constants, ESTYLF 2008 (Mieres, Spain, September 2008) (joint work with F. Esteva and L. Godo)*

On generalized continuous and left-continuous t-norms over chains: a survey, Linz Seminar 2009 (Linz, Austria, February 2009) (joint work with F. Esteva and L. Godo)

Semilinear logics, Shanks Workshop on Ordered Groups in Logic (Vanderbilt University, Nashville, USA, March 2009) (joint work with P. Cintula)*

Arithmetical hierarchy of fuzzy logics over rational and finite-chain semantics, TACL09 (Amsterdam, Netherlands, July 2009) (joint work with F. Montagna)

First-order (semilinear) implicational logics, TACL09 (Amsterdam, Netherlands, July 2009) (joint work with P. Cintula)*

An abstract approach to fuzzy logics: implicational semilinear logics, IFSA-EUSFLAT 2009 (Lisbon, Portugal, July 2009) (joint work with P. Cintula)

Logics with a (lattice) disjunction and their completeness properties, (Linz, Austria, February 2010) (joint work with P. Cintula)

A general approach to non-classical first-order logics, World Congress on Universal Logic III (Estoril, Portugal, April 2010) (joint work with P. Cintula)

Lattice disjunction is not a disjunction (in many substructural logics), Algebra and Substructural Logics ASubL4 (JAIST, Ishikawa, Japan, June 2010) (joint work with P. Cintula)*

First-Order Substructural Logics: an algebraic approach, Algebra and Substructural Logics ASubL4 (JAIST, Ishikawa, Japan, June 2010) (joint work with P. Cintula)

Implicational logics vs. order algebraizable logics, Logic, Algebra and Truth Degrees 2010 (Prague, Czech Republic, September 2010) (joint work with P. Cintula)

(Non-associative) Substructural Fuzzy Logics I: Propositional Logics, Algebraic Semantics for Uncertainty and Vagueness (Salerno, Italy, May 2011) (joint work with P. Cintula)

(Non-associative) Substructural Fuzzy Logics II: Predicate Logics, Algebraic Semantics for Uncertainty and Vagueness (Salerno, Italy, May 2011) (joint work with P. Cintula)*

The hierarchy of implicational and order algebraizable logics, Order, Algebra and Logics 2011 (Krakow, Poland, June 2011) (joint work with P. Cintula)

Generalized Disjunctions in (Infinitary) Structural Consequence Relations, Logic Colloquium 2011 (Barcelona, July 2011) (joint work with P. Cintula)*

Fuzzy logics with truth hedges revisited, EUSFLAT 2011 (Aix-Les-Bains, France, July 2011) (joint work with F. Esteva and L. Godo)

A new approach to fuzzy logics with truth stressers and depressers, 14th Congress of Logic, Methodology and Philosophy of Science (Nancy, France, July 2011) (joint work with F. Esteva and L. Godo)

Almost (MP)-based substructural logics, 5th Topology, Algebra, and Categories in Logic (Marseilles, France, July 2011) (joint work with P. Cintula)*

Equational Bases for Joins of Subvarieties of Algebras of Non-Classical Logics, Ordered groups and lattices in algebraic logic (Tbilisi, Georgia, September 2011) (joint work with P. Cintula)*

Almost (MP)-based substructural logics, 12th Asian Logic Conference (Wellington, New Zealand, December 2011) (joint work with P. Cintula)*

Semilinear non-associative substructural logics: completeness properties and complexity, 15th Latin American Symposium on Mathematical Logic (Bogotá, Colombia, June 2012) (joint work with P. Cintula, Z. Haniková and R. Horečík)*

A basic fuzzy logic which is really basic and fuzzy, Logic, Algebra and Truth Degrees

2012 (Kanazawa, Japan, September 2012) (joint work with P. Cintula and R. Horčík)

A note on the hierarchy of algebraizable logics, 4th World Congress on Universal Logic (Rio de Janeiro, Brazil, 3 – 7 April 2013) (joint work with P. Cintula)

On the scope of the completeness theorem for first-order predicate logic, 4th World Congress on Universal Logic (Rio de Janeiro, Brazil, 3 – 7 April 2013) (joint work with P. Cintula)*

On the role of disjunction in the theory of consequence relations, 27th International Symposium Logica (Hejnice, Czech Republic, 17 – 21 June 2013) (joint work with P. Cintula)

Two-layer modal logics: from fuzzy logics to a general framework, 6th Topology, Algebra, and Categories in Logic (Nashville, Tennessee, USA, July 2013) (joint work with P. Cintula)*

Exploring paraconsistency in degree-preserving fuzzy logics, EUSFLAT 2013 (Milan, Italy, September 2013) (joint work with R. Ertola, F. Esteva, T. Flaminio and L. Godo)*

A completeness theorem for two-layer modal logics, Workshop on Algebraic Logic in Computer Science in the 19th International Conference on Logic for Programming Artificial Intelligence and Reasoning LPAR 2013 (Stellenbosch, South Africa, 14 – 19 December 2013) (joint work with P. Cintula)*

The quest for the basic fuzzy logic, Workshop on Algebraic Logic in Computer Science in the 19th International Conference on Logic for Programming Artificial Intelligence and Reasoning LPAR 2013 (Stellenbosch, South Africa, 14 – 19 December 2013) (joint work with P. Cintula)

Paraconsistent Degree-Preserving Fuzzy Logics, World Congress on Paraconsistency (Kolkata, India, 13 – 17 February 2014) (joint work with R. Ertola, F. Esteva, T. Flaminio and L. Godo)

Advances on elementary equivalence in model theory of fuzzy logics, Logic, Algebra and Truth Degrees 2014 (Vienna, Austria, July 2014) (joint work with P. Dellunde and À. García-Cerdàña)

Modal logics of uncertainty with two layer-syntax: a general completeness theorem, 21st Workshop on Logic, Language, Information and Computation (Valparaíso, Chile, 1 – 4 September 2014) (joint work with P. Cintula)

Löwenheim-Skolem theorems for first-order algebraizable logics, Israeli Workshop on Non-Classical Logics and Their Applications (Haifa, Israel, 29 September – 1 October 2014) (joint work with P. Dellunde and À. García-Cerdàña)

Combining logics using two-layer modal syntax, Beyond True and False: Logic, Algebra, and Topology (Florence, Italy, December 2014) (joint work with P. Cintula)*

Characterization of infinitary semilinear logics, Algebra and Substructural Logics AsubL5 (La Trobe University, Melbourne, Australia, 13 – 16 December 2014) (joint work with P. Cintula)

Fuzzy logics as logics of linearly ordered resources I: Foundations, Workshop on Vagueness via Non-classical Logics (University of Sydney, Sydney, Australia, 17 – 19 December 2014) (joint work with L. Behounek and P. Cintula)

Fuzzy logics as logics of linearly ordered resources II: Applications, Workshop on Vagueness via Non-classical Logics (University of Sydney, Sydney, Australia, 17 – 19 December 2014) (joint work with L. Behounek and P. Cintula)*

A characterization theorem for infinitary fuzzy logics, MaToMUVI workshop (Buenos Aires, 25 – 27 February 2015) (joint work with P. Cintula)

Beyond finitariness in abstract algebraic logic I: From motivation to a theory, The 20th Conference Applications of Logic in Philosophy and the Foundations of Mathematics (Szkłarska Poreba, Poland 4-8 May 2015) (joint work with P. Cintula)

Beyond finitariness in abstract algebraic logic II: The case of disjunction, The 20th Conference Applications of Logic in Philosophy and the Foundations of Mathematics (Szkłarska Poreba, Poland 4-8 May 2015) (joint work with P. Cintula)*

Beyond finitariness in abstract algebraic logic III: Hierarchy and separating examples, The 20th Conference Applications of Logic in Philosophy and the Foundations of Mathematics (Szkłarska Poreba, Poland 4-8 May 2015) (joint work with T. Lávička)*

Two-layer Modal Logics: Formalism and Applications, 29th International Symposium Logica 2015 (Hejnice, Czech Republic, 15 – 19 June 2015) (joint work with P. Cintula)

Dense completeness theorem for protoalgebraic logics, Topology, Algebra, and Categories in Logic TACL 2015 (Ischia, Italy 21 – 26 June 2015) (joint work with P. Cintula)*

Extending the set of variables in propositional logics, 15th Congress of Logic, Methodology and Philosophy of Science (Helsinki, Finland, 3 – 8 August 2015) (joint work with P. Cintula)

Completeness theorem for first-order algebraizable logics, Logic Colloquium 2015 (Helsinki, Finland, 3 – 8 August 2015) (joint work with P. Cintula)*

(Those talks marked with * were presented by another author of the corresponding paper)

Posters:

Involutive Fuzzy Logics (Setena Trobada Matemàtica, Barcelona, May 8, 2004)

Conferences and workshops attended:

Third European Congress of Mathematics (Barcelona, July 2000).

First Workshop on the Foundations of Mathematics (Barcelona, July 2002).

Second Workshop on the Foundations of Mathematics (Barcelona, July 2003).

3rd EUSFLAT Conference (Zittau, Germany, September 2003).

Fourth Workshop on Soft Computing (Brno, Czech Republic, October 2003).

Setena Trobada Matemàtica (Barcelona, 8 May 2004).

Residuated Structures and Many-valued Logics (Patras, Greece, June 2004).

IPMU 2004 (Perugia, Italy, July 2004).

VRSR 2004 (Raspenava, Czech Republic, November 2004).

Algebraic and topological methods in non-classical logics II (Barcelona, June 2005).

4th EUSFLAT Conference (Barcelona, September 2005).

The Logic of Soft Computing IV (Ostrava, Czech Republic, October 2005).

Ordered Structures in Many-valued Logic (Massa Lubrense, Italy, June 2006).

IPMU 2006 (Paris, France, July 2006).

Uncertainty: Reasoning about probability and vagueness. Prague International Colloquium 2006 (Prague, Czech Republic, September 2006).

Second Czech-Catalan Conference in Mathematics (Barcelona, September 2006).

Order, Algebra and Logic (Nashville, USA, June 2007).

5th EUSFLAT Conference (Ostrava, Czech Republic, September 2007).

Non-classical Logics: from Foundations to Applications (Centro di Ricerca Matematica Ennio De Giorgi, Scuola Normale Superiore, Pisa, Italy, April 2008).

Logica 2008 (Hejnice, Czech Republic, 16 – 20 June 2008).

Sixth European Conference on Analytical Philosophy (Krakow, Poland, 21 – 26 August 2008).

Logic, Algebra and Truth Degrees (Siena, Italy, 8 – 11 September 2008).

First meeting of the “Logical Models of Reasoning with Vague Information” project,

IIIA – CSIC (Barcelona, 5 November 2008).

International Workshop on Mathematical Fuzzy Logic and Soft Computing (Barcelona, 7 – 8 November 2008).

Linz Seminar 2009 (Linz, Austria, 3 – 7 February 2009).

Prague international seminar on semilinear logics (Institute of Computer Science of the Academy of Sciences of the Czech Republic, 24 February 2009).

TACL09 (Amsterdam, Netherlands, 7 – 11 July 2009).

IFSA-EUSFLAT 2009 (Lisbon, Portugal, 20 – 24 July 2009).

Logical Models of Reasoning with Vague Information (Cejkovice, Czech Republic, 14 – 17 September 2009).

Second Workshop on Vagueness and Metaphysics (Barcelona, 21 – 22 January 2010).

Tenth International Conference on Fuzzy Set Theory and Applications FSTA 2010 (Liptovský Jan, Slovakia, 1 – 5 February 2010).

The Beauty of Logic II (Prague, Czech Republic, 6 – 8 February 2010).

Linz Seminar 2010 (Linz, Austria, 9 – 13 February 2010).

World Congress on Universal Logic III (Estoril, Portugal, 22 – 25 April 2010).

IEEE International Symposium on Multiple-Valued Logic 2010 (Barcelona, 26 – 28 May 2010).

Algebra and Substructural Logics ASubL4 (JAIST, Ishikawa, Japan, 8 – 10 June 2010).

Workshop on fuzzy logics and non-classical logics (Kyoto, Japan, 14 June 2010).

Logic, Algebra and Truth Degrees 2010 (Prague, Czech Republic, 7 – 11 September 2010).

Epistemic aspects of Many-Valued Logic (Prague, Czech Republic, 13 – 16 September 2010).

Workshop on Dialogues, Inference, and Proof - Logical and Empirical Perspectives (Vienna, Austria, 26 – 28 November 2010).

Algebraic Semantics for Uncertainty and Vagueness (Salerno, Italy, 18 – 20 May 2011).

Order, Algebra and Logics 2011 (Krakow, Poland, 6 – 10 June 2011).

Logic Colloquium 2011 (Barcelona, 11 – 16 July 2011).

EUSFLAT 2011 (Aix-Les-Bains, France, 18 – 22 July 2011).

Logical Modelling: The interface between the formal and the empirical, LogICCC Symposium at the 14th Congress of Logic, Methodology and Philosophy of Science. (Nancy, France, 21 July 2011).

Argentinian Mathematical Society meeting 2011 (San Miguel de Tucumán, Argentina, 20 – 23 September 2011).

Second meeting on Artificial Intelligence and Quality of Life (Barcelona, 26 November 2011).

15th Latin American Symposium on Mathematical Logic (Bogotá, Colombia, 4 – 8 June 2012).

Logic, Algebra and Truth Degrees 2012 (Kanazawa, Japan, 10 – 14 September 2012).

Third meeting on Artificial Intelligence and Quality of Life (Barcelona, 1 December 2012).

A gathering of Prague-based logicians (Prague, Czech Republic, 15 – 16 February 2013).

4th World Congress and School on Universal Logic (Rio de Janeiro, Brazil, 29 March – 7 April 2013).

Spring seminar of the Department of Logic of Charles University (Zeliv, Czech Republic, 26 – 28 April 2013).

27th International Symposium Logica 2013 (Hejnice, Czech Republic, 17 – 21 June 2013).

ManyVal 2013: Games, decisions and rationality (Prague, Czech Republic, 4 – 6 September 2013).

VRSR 2013 (Trojanovice, Czech Republic, 26 – 27 October 2013).

Second Prague Symposium on Semilinear Logics (Prague, Czech Republic, 20 November 2013).

19th International Conference on Logic for Programming Artificial Intelligence and Reasoning LPAR 2013 (Stellenbosch, South Africa, 14 – 19 December 2013).

5th World Congress on Paraconsistency, (Kolkata, India, 13 – 17 February 2014).

Spring seminar of the Department of Logic of Charles University (Dvoračky, Czech Republic, 30 – 31 May 2014).

28^h International Symposium Logica 2014 (Hejnice, Czech Republic, 17 – 20 June 2014).

Logic, Algebra and Truth Degrees 2014 (Vienna, Austria, 16 – 19 July 2014).

21st Workshop on Logic, Language, Information and Computation (Valparaíso, Chile, 1 – 4 September 2014).

Israeli Workshop on Non-Classical Logics and Their Applications (Haifa, Israel, 29 September – 1 October 2014).

VRSR 2014 (Jindřichův Hradec, Czech Republic, 1 – 2 November 2014).

Algebra and Substructural Logics ASubL5 (La Trobe University, Melbourne, Australia, 13 – 16 December 2014).

Workshop on Vagueness via Non-classical Logics (University of Sydney, Sydney, Australia, 17 – 19 December 2014).

MaToMUVI workshop (Buenos Aires, 25 – 27 February 2015).

The 20th Conference Applications of Logic in Philosophy and the Foundations of Mathematics (Szklarska Poreba, Poland 4-8 May 2015).

Prague seminar on Non-Classical Mathematics (Prague, Czech Republic, 11 – 13 June 2015).

29^h International Symposium Logica 2015 (Hejnice, Czech Republic, 15 – 19 June 2015).

Topology, Algebra, and Categories in Logic TACL 2015 (Ischia, Italy 21 – 26 June 2015).

15th Congress of Logic, Methodology and Philosophy of Science (Helsinki, Finland, 3 – 8 August 2015).

Logic Colloquium 2015 (Helsinki, Finland, 3 – 8 August 2015).

Visits to other institutions:

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 19 – 31 October 2003).

Department of Computer Science and Mathematics, University of Salerno (February – April 2004).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 25 October – 8 November 2004).

Institute of Computer Science of the Academy of Sciences of the Czech Republic

(Prague, 22 November – 4 December 2004).

Department of Mathematics and Computer Science, University of Siena (17 May – 15 July 2005).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 11 – 14 October 2005).

Institute für Algebra und Computermathematik, Technische Universität Wien, Austria (21 – 25 November 2005).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 4 – 12 September 2006).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 4 – 10 September 2007).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 17 – 21 September 2007).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 3 – 10 December 2007).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 9 – 16 June 2008).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 27 – 31 August 2008).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 8 – 27 February 2009).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 14 – 26 February 2010).

Research Institute for Mathematical Sciences, Kyoto University (Kyoto, Japan, 11 – 16 June 2010).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 6 September – 3 October 2010).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 25 May – 3 June 2011).

Institute of Applied Mathematics of Litoral IMAL – CONICET (Santa Fe, Argentina, 26 – 31 July 2011).

Department of Computer Science, University of Buenos Aires (Buenos Aires, Argentina, 26 July 2011 – 27 September 2011).

Department of Mathematics, National University of the South (Bahía Blanca, Argentina, 13 – 17 August 2011).

National University of Central Buenos Aires (Tandil, Argentina, 12 – 21 September 2011).

Institute for Computer Science, Vienna University of Technology, Vienna, Austria (26 October – 4 November 2011).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 5 – 26 March 2012).

Department of Mathematics and Algebra, Palacky University of Olomouc (Olomouc, Czech Republic, 19 – 20 March 2012).

Centre for Logic, Epistemology and the History of Science, University of Campinas, Brazil (10 May – 9 June 2012).

Institute of Computer Science of the Academy of Sciences of the Czech Republic (Prague, 17 – 25 August 2012).

Artificial Intelligence Research Institute, IIIA – CSIC (Bellaterra, Catalonia, 22 – 31 May 2013).

University of Bern, (Bern, Switzerland, 24 – 30 June 2013).

Autonomous University of Barcelona (Bellaterra, Catalonia, 9 – 20 October 2013).

Department of Computer Science, Palacky University of Olomouc (Olomouc, Czech Republic, 16 January 2014).

Autonomous University of Barcelona (Bellaterra, Catalonia, 22 – 29 May 2014).

National University of Central Buenos Aires (Tandil, Argentina, 15 January – 14 March 2015).

Autonomous University of Barcelona (Bellaterra, Catalonia, 18 – 29 September 2015).

Coordinator of the Working Group on Mathematical Fuzzy Logic MATHFUZZLOG (Since September 2007)

Coordinator of the ERCIM Working Group on Many-valued Logic MANYVAL (since 2014)

Member of the editorial board of:

Journal of Multiple-Valued Logic and Soft Computing (since 2014)

International Journal of Mathematics and Mathematical Sciences (2013-2015)

Referee of scientific projects for the following agencies:

Austrian Science Fund

Referee for the international journals:

Algebra Universalis

Archive for Mathematical Logic

Artificial Intelligence

Computers and Mathematics with Applications

Discussiones Mathematicae, General Algebra and Applications

Fuzzy Sets and Systems

Information Sciences

International Journal of Approximate Reasoning

International Journal of Uncertainty, Fuzziness and Knowledge-based Systems

Journal of Applied Non-Classical Logics

Journal of Logic and Computation

Journal of Multiple-Valued Logic and Soft Computing

Journal of Symbolic Logic

Kybernetika

Logic Journal of the IGPL

Logical Methods in Computer Science

Logica Universalis

Mathematical Logic Quarterly

Mathematica Slovaca

Notre Dame Journal of Formal Logic

Soft Computing – A Fusion of Foundations, Methodologies and Applications

Studia Logica

(total number of reviewed papers: 93)

Referee for chapters in the following books:

Algebraic and Proof-theoretic Aspects of Non-classical Logics, Papers in Honor of Daniele Mundici on the Occasion of His 60th Birthday, Lecture Notes in Computer Science / Lecture Notes in Artificial Intelligence, 2007.

Witnessed years – a tribute to Petr Hájek, College Publications, 2009.

Understanding Vagueness – Logical, Philosophical, and Linguistic Perspectives, College Publications, 2011.

Handbook of Mathematical Fuzzy Logic – volume 1, College Publications, 2011.

Handbook of Mathematical Fuzzy Logic – volume 2, College Publications, 2011.

Outstanding contributions of Petr Hájek, Trends in Logic, 2013.

Outstanding contributions of Hiroakira Ono, Trends in Logic, 2016.

Referee for the international conferences:

EUSFLAT 2003

IPMU 2004

EUSFLAT 2005

IPMU 2006
IEEE International Symposium on Multiple-Valued Logic 2008
IPMU 2008
Logic, Algebra and Truth Degrees 2008
IFSA-EUSFLAT 2009
IEEE International Symposium on Multiple-Valued Logic 2010
IPMU 2010
Logic, Algebra and Truth Degrees 2010
Computer Science and Logic 2010
EUSFLAT 2011
Foundations of Information and Knowledge Systems 2012
The 6th International Joint Conference on Automated Reasoning IJCAR 2012
IPMU 2012
Logic, Algebra and Truth Degrees 2012
Philosophy of Mathematics of Uncertainty and Vagueness 2012
EUSFLAT 2013
Doctoral Symposium on Recent Advances in Information Technology (DS-RAIT 2013)
19th International Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR 2013)
28th International Symposium Logica 2014
Logic, Algebra and Truth Degrees 2014
IEEE International Symposium on Multiple-Valued Logic 2015
29th International Symposium Logica 2015
18th International Conference of the Catalan Association for Artificial Intelligence (CCIA 2015)
(total number of reviewed papers: 69)

Member of the following scientific associations:

Association for Symbolic Logic
Catalan Association for Artificial Intelligence
Catalan Mathematical Society
European Society for Fuzzy Logic and Technology
Working group on Mathematical Fuzzy Logic

POLITICAL CV:

Since 2004: Member of the party Republican Left of Catalonia (ERC)

December 2010 – April 2011: Activist for the political campaign *Barcelona Decideix*

Since April 2011: Member of the political association Catalan National Assembly

July 2011 – December 2012: Vice president of the local branch of ERC in Gràcia district (Barcelona)

Since October 2011: Member of the political association *Catalunya Sí*

February – December 2012: Secretary of the commission of ERC for Universities, Research and Innovation

August – September 2013: Organizer of the Catalan Way in Prague

November 2013 – December 2014: Member of the board of the Czech-Catalan Society, secretary of culture

Since April 2014: Secretary of local branch of Catalan National Assembly in the Czech Republic

Since December 2014: Vicepresident of the Czech-Catalan Society

PUBLICATIONS:

Books:

C. NOGUERA. *Algebraic study of axiomatic extensions of triangular norm based fuzzy logics*, Monografies de l'Institut d'Investigació en Intel·ligència Artificial vol. 27, Bellaterra, 2007 (ISBN: 978-84-00-08538-4).

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

Chapters in books:

C. NOGUERA, F. ESTEVA, J. GISPERT. 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).

P. CINTULA, C. NOGUERA. A general framework for fuzzy logics. *Handbook of Mathematical Fuzzy Logic – volume 1*, Chapter II, Studies in Logic, Mathematical Logic and Foundations, vol. 37, College Publications, London, 2011, pp. 103 – 207 (ISBN: 978-1-84890-039-4).

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

P. CINTULA, R. HORCÍK, C. NOGUERA. The quest for the basic fuzzy logic. *Petr Hájek on Mathematical Fuzzy Logic*, Outstanding Contributions to Logic, vol. 6, Franco Montagna (ed), Springer, 2014, pp. 245 – 290 (ISBN: 978-3-319-06232-7).

Edited volumes and special issues:

Logic, Algebra and Truth Degrees 2010 – volume of abstracts, Institute for Theoretical Computer Science Series, vol. 502, Prague, Czech Republic, 2010 (with

Karel Chvalovský and Petr Cintula).

Special issue on Mathematical Fuzzy Logic, *Journal of Logic and Computation*, volume 21, issue 5, 2011 (with Petr Cintula and George Metcalfe).

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) (with Petr Cintula and Petr Hájek).

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) (with Petr Cintula and Petr Hájek).

Handbook of Mathematical Fuzzy Logic – Volume 3, Studies in Logic, Mathematical Logic and Foundations, vol. ?, College Publications, London, to appear. (ISBN: ?) (with Petr Cintula and Chris Fermüller).

Special issue on Mathematical Fuzzy Logic – in honor of Francesc Esteva, *Fuzzy Sets and Systems*, to appear (with Félix Bou, Marco Cerami, Àngel García-Cerdaña, and Lluís Godo).

Papers in journals:

À. GARCÍA-CERDAÑA, C. NOGUERA, F. ESTEVA. On the scope of some formulas defining additive connectives in fuzzy logics, *Fuzzy Sets and Systems* 154 (2005) 56 – 75.

C. NOGUERA, F. ESTEVA, J. GISPERT. Perfect and bipartite IMTL-algebras and disconnected rotations of prelinear semihoops, *Archive for Mathematical Logic* 44 (2005) 869 – 886.

C. NOGUERA, F. ESTEVA, J. GISPERT. On some varieties of MTL-algebras, *Logic Journal of the IGPL* 13 (2005) 443 – 466.

F. ESTEVA, L. GODO, C. NOGUERA. On Rational Weak Nilpotent Minimum Logics, *Journal of Multiple-valued Logic & Soft Computing* 12 (2006) 9 – 32.

P. SAVICKY, R. CIGNOLI, F. ESTEVA, L. GODO, C. NOGUERA. On product logic with truth constants, *Journal of Logic and Computation* 16 (2006) 205 – 225.

F. MONTAGNA, C. NOGUERA, R. HORCÍK. On weakly cancellative fuzzy logics, *Journal of Logic and Computation* 16 (2006) 423 – 450.

F. ESTEVA, J. GISPERT, L. GODO, C. NOGUERA. Adding truth-constants to logics of continuous t-norms: axiomatization and completeness results, *Fuzzy Sets and Systems* 158 (2007) 597 – 618.

R. HORCÍK, C. NOGUERA, M. PETRÍK. On n-contractive fuzzy logics, *Mathematical Logic Quarterly* 53 (2007) 268 – 288.

F. ESTEVA, L. GODO, C. NOGUERA. On completeness results for predicate Lukasiewicz, Product, Gödel, and Nilpotent Minimum logics expanded with truth-constants, *Mathware & Soft Computing* 14(3) (2007) 233 – 246.

C. NOGUERA, F. ESTEVA, J. GISPERT. On triangular norm based axiomatic extensions of the Weak Nilpotent Minimum logic, *Mathematical Logic Quarterly* 54 (2008) 387 – 409.

C. NOGUERA. A mathematical approach to the vagueness problem, *Butlletí de la Societat Catalana de Matemàtiques* 23 (2008) 233-273. (in Catalan)

P. CINTULA, F. ESTEVA, J. GISPERT, L. GODO, F. MONTAGNA, C. NOGUERA. Distinguished algebraic semantics for t-norm based fuzzy logics: methods and algebraic equivalencies, *Annals of Pure and Applied Logic* 160 (2009) 53 – 81.

F. ESTEVA, L. GODO, C. NOGUERA. 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.

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

F. ESTEVA, L. GODO, C. NOGUERA. 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.

C. NOGUERA, F. ESTEVA, L. GODO. Generalized continuous and left-continuous t-norms arising from algebraic semantics for fuzzy logics, *Information Sciences* 180 (2010) 1354 – 1372.

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

P. CINTULA, C. NOGUERA. Implicational (semilinear) logics I: a new hierarchy, *Archive for Mathematical Logic* 49 (2010) 417 – 446.

P. CINTULA, C. NOGUERA. The proof by cases property and its variants in structural consequence relations, *Studia Logica* 101 (2013) 713 – 747.

F. ESTEVA, L. GODO, C. NOGUERA. A logical approach to fuzzy truth hedges, *Information Sciences* 232 (2013) 366 – 385.

P. CINTULA, R. HORCÍK, C. NOGUERA. Non-associative substructural logics and their semilinear extensions: axiomatization and completeness properties, *The Review of Symbolic Logic* 6 (2013) 394 – 423.

P. CINTULA, C. NOGUERA. A Henkin-style proof of completeness for first-order

algebraizable logics. *Journal of Symbolic Logic* 80 (2015) 341 – 358.

R. ERTOLA, F. ESTEVA, T. FLAMINIO, L. GODO, C. NOGUERA. Paraconsistency properties in degree-preserving fuzzy logics, *Soft Computing - A Fusion of Foundations, Methodologies and Applications* 19 (2015) 531 – 546.

P. CINTULA, C. NOGUERA. A note on natural extensions in abstract algebraic logic. *Studia Logica*. 103 (2015) 815 – 823.

P. DELLUNDE, À. GARCÍA-CERDAÑA, C. NOGUERA. Löwenheim-Skolem theorems for non-classical first-order algebraizable logics. To appear in *Logic Journal of the IGPL*.

P. CINTULA, C. NOGUERA. Implicational (semilinear) logics II: additional connectives and characterizations of semilinearity. To appear in *Archive for Mathematical Logic*.

Papers in conference proceedings:

F. ESTEVA, À. GARCÍA-CERDAÑA, C. NOGUERA. On definability of maximum in left-continuous t-norms, *Proceedings of Third EUSFLAT*, pp. 271 – 288, M. Wagenknecht, R. Hampel (eds), Zittau, 2003.

À. GARCÍA-CERDAÑA, C. NOGUERA, F. ESTEVA. 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.

F. ESTEVA, L. GODO, C. NOGUERA. 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.

F. ESTEVA, L. GODO, C. NOGUERA. 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.

R. CIGNOLI, F. ESTEVA, L. GODO, C. NOGUERA. 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.

C. NOGUERA, F. ESTEVA, J. GISPERT. On varieties generated by Weak Nilpotent Minimum t-norms, *Proceedings of Fourth EUSFLAT*, pp. 866 – 871, Barcelona, 2005.

F. MONTAGNA, R. HORCÍK, C. NOGUERA. 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.

C. NOGUERA, F. ESTEVA, J. GISPERT. 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.

F. ESTEVA, L. GODO, C. NOGUERA. 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.

F. ESTEVA, L. GODO, C. NOGUERA. 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.

F. ESTEVA, L. GODO, C. NOGUERA. 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.

P. CINTULA, C. NOGUERA. 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.

F. ESTEVA, L. GODO, C. NOGUERA. 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.

F. ESTEVA, L. GODO, C. NOGUERA. 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.

P. CINTULA, C. NOGUERA. 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).

C. NOGUERA. 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 Mikuláš, Slovakia, 2010 (ISBN: 978-80-8040-391-1).

P. CINTULA, C. NOGUERA. Logics with a (lattice) disjunction and their completeness properties, *Proceedings of the 31th Linz Seminar on Fuzzy Set Theory*, pp. 26 – 30, P. Cintula, E.P. Klement, L. Stout (eds), Universitätsdirektion, Johannes

Kepler Universität, A-4040 Linz, 2010.

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