

# Curriculum Vitae

Marco Cerami

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## Personal Information

**Surname:** Cerami  
**Name:** Marco  
**Date of Birth:** February 4<sup>th</sup>, 1977  
**Place of Birth:** Sassari, Italy  
**Nationality:** Italian  
**Address:** Skolní ulice 2, 77900, Olomouc, Czech Republic  
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of Computer Science, 17.listopadu 12, 77146,  
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## Education

### PhD

**Subject:** Pure and Applied Logic  
**University:** Universitat de Barcelona, Barcelona, Spain  
**Advisors:** F. Esteva, F. Bou, L. Godo  
**Dissertation** *Fuzzy Description Logics from a Mathematical Fuzzy Logic  
point of view*  
**Date:** October 16<sup>th</sup>, 2012

### Master of Science

**Subject:** Pure and Applied Logic  
**University:** Universitat de Barcelona, Barcelona, Spain  
**Date:** September 30<sup>th</sup>, 2008

## Degree

**Faculty:** Philosophy  
**University:** Università degli Studi di Palermo, Palermo, Italy  
**Date:** March 2<sup>nd</sup>, 2004

## Employment

### Current employment

**starting date:** March 20<sup>th</sup>, 2013  
**place:** Univerzita Palacký (UP) of Olomouc, Faculty of Science,  
Department of Computer Science  
**position:** post-doctoral researcher

### Past employment

**starting date:** October 1<sup>st</sup>, 2008  
**ending date:** September 30<sup>th</sup>, 2012  
**place:** Artificial Intelligence Research Institute (IIIA), Spanish  
National Research Council (CSIC)  
**position:** doctoral student

## Academic Activity

### Scientific talks

- *Many-valued Horn Logic is Hard*, Univerzita Palacký, Faculty of Sciences, Department of Computer Science, December 18<sup>th</sup>, 2015.
- *Structural subsumption algorithm for Fuzzy Description Logics*, Univerzita Palacký, Faculty of Sciences, Department of Computer Science, December 11<sup>th</sup>, 2015.
- *Fuzzy Description Logics*, Univerzita Palacký, Faculty of Sciences, Department of Computer Science, November 28<sup>th</sup>, 2013.
- *Description Logics: An Introduction*, Univerzita Palacký, Faculty of Science, Department of Computer Science, November 21<sup>st</sup>, 2013.
- *Una introducción a la Lógica Borrosa Matemática*, SIMBA seminar, Universitat de Barcelona, Faculty of Mathematics, February 14<sup>th</sup>, 2012.
- *Decidability of a Description Logic over Infinite-Valued Lukasiewicz and Product Logic*, Non-classical logic seminar, Universitat de Barcelona, Faculty of Mathematics, May 21<sup>st</sup>, 2010.
- *Decidability of a Description Logic over Infinite-Valued Product Logic*, scientific seminar at IIIA-CSIC, Bellaterra, March 17<sup>th</sup>, 2010.

## Lectures

- *Introduction to Modal Logic*
  - place:* Univerzita Palacký of Olomouc, Faculty of Sciences,  
Department of Computer Science
  - period:* 10.10.2013–5.12.2013
  - hours:* 12
  - target group:* academic personal and doctoral students
- *Computer Science*
  - place:* Univerzita Palacký of Olomouc, Faculty of Sciences,  
Department of Computer Science
  - period:* 19.2.2014–9.4.2014
  - hours:* 16
  - target group:* master students
- *Formal Concepts Analysis*
  - place:* Univerzita Palacký of Olomouc, Faculty of Sciences,  
Department of Computer Science
  - period:* 20.2.2014–27.3.2014
  - hours:* 24
  - target group:* master students

## Conference talks

- *Undecidability of Fuzzy Description Logics with GCI's under Lukasiewicz semantics*, WL4AI workshop em ECAI 2012, Montpellier, August 28<sup>th</sup>, 2012.
- *On Finitely Valued Fuzzy Description Logics: The Lukasiewicz Case*, IPMU 2012, Catania, July 11<sup>th</sup>, 2012.
- *From Classical Description Logic to  $n$ -graded Fuzzy Description Logic*, Fuzz-IEEE 2010, Barcelona, July 22<sup>nd</sup>, 2010.
- *Decidability of a Description Logic over Infinite-Valued Product Logic*, KR 2010, Toronto, May 10<sup>th</sup>, 2010.
- *Vague Counterfactuals*, ProbNet 2010, Salzburg, February 27<sup>th</sup>, 2010.
- *On Quantitative Similarity-based Semantics for Counterfactuals*, WUPES 2009, Liblice, September 23<sup>rd</sup>, 2009.

## Poster presentations

- *Complexity Sources in Fuzzy Description Logic*. DL 2014, July, 18<sup>th</sup>, 2014, Vienna.

- *Finite-valued Lukasiewicz Modal Logic is PSPACE-complete*. IJCAI 2011, July 18<sup>th</sup>, 2011, Barcelona.
- *Theoretical foundation of fuzzy description logics and their applications as languages for ontology representation*, Doctoral Consortium at KR 2010, May 11<sup>th</sup>, 2010, Toronto.

## Reviews

### Journals

- Soft Computing.
- Reports on Mathematical Logic.
- Mathematical Logic Quarterly.
- International Journal of Semantic Web and Information Systems (IJSWIS).

### Conferences

- PRUV 2014, Vienna, July, 23–24, 2014.
- DL 2014, Vienna, July 17–20, 2014.
- Fuzz-IEEE 2014, Beijing, July 6–11, 2014.
- EUSFLAT 2013, Milano, September 11–13, 2013.
- IJCAR 2012, Manchester, June 26–July 1, 2012.
- Fuzz-IEEE 2012, Brisbane, June, 10–15, 2012.
- ICISTM 2012, Grenoble, March, 28–30, 2012.
- IJCAI 2011, Barcelona, July, 16–22, 2011.
- Fuzz-IEEE 2011, Taipei, June, 27–30, 2011.

### Program Committee membership

- PRUV 2014, Vienna, July, 23–24, 2014.
- IJCAI 2011, Barcelona, July, 16–22, 2011.

## Funding

### Grants

- Doctoral grant “JAE Predoc” n. 074, issued by the Spanish National Research Council (CSIC). Since October 1<sup>st</sup>, 2008, until September 30<sup>th</sup>, 2012.
- Postdoctoral grant in the framework of the European Social Fund (ESF) project “POST-UP II” No. CZ.1.07/2.3.00/30.0041 and co-financed by the state budget of Czech Republic. Since March 20<sup>th</sup>, 2013.

### Research projects

- Participation in the project “ARINF” MICINN TIN2009-14704-C03-03, of the spanish Ministry for Science and Innovation (MICINN). Since January 1<sup>st</sup>, 2010, until September 30<sup>th</sup>, 2012.

### Awards

- EUSFLAT 2012 Best PhD Thesis Award.

## Languages

	<b>spoken</b>	<b>written</b>
<b>Italian</b>	native	native
<b>Spanish</b>	good	good
<b>Catalan</b>	good	medium
<b>English</b>	medium	medium
<b>Czech</b>	low	low
<b>German</b>	low	low

## Publications

### Journal papers

1. M. Cerami, A. García-Cerdaña, F. Esteva. *On Finitely-valued Fuzzy Description Logics*. International Journal of Approximate Reasoning (impact factor: 1,977). Vol. 55(9), pp. 1890–1916, 2014.
2. M. Cerami, U. Straccia. *On the (Un)Decidability of Fuzzy Description Logics under Lukasiewicz  $t$ -norm*. Information Sciences (impact factor: 3,893). Vol. 227, pp. 1–21, 2013.
3. M. Cerami, F. Esteva. *Strict core fuzzy logics and quasi-witnessed models*. Archive for Mathematical Logic (impact factor: 0,324). Vol. 50(5-6), pp. 625–641, 2011.

## Book chapters

1. M. Cerami, P. Pardo. *Many-valued semantics for vague counterfactuals*. In “Understanding Vagueness - Logical, Philosophical and Linguistic Perspectives”, P. Cintula, C. G. Fermüller, L. Godo, P. Hájek editors, Studies in Logic, no. 36, pp. 341–362. College Publications, 2011.

## Top international conference papers

1. F. Bou, M. Cerami, F. Esteva. *Finite-valued Lukasiewicz modal logic is PSPACE-complete*. In Proceedings of the 22<sup>nd</sup> International Joint Conference on Artificial Intelligence (IJCAI 2011, conference CORE rank: A\*), pp. 774–779. Barcelona, 2011.
2. M. Cerami, A. García-Cerdaña, F. Esteva. *From classical description logic to n-graded fuzzy description logics*. In Proceedings of the Fuzz-IEEE 2010 Conference (conference CORE rank: A), pp. 1506–1513. Barcelona, 2010.
3. M. Cerami, F. Esteva, F. Bou. *Decidability of a description logic over infinite-valued product logic*. In Proceedings of the 12<sup>th</sup> International Conference on Principles of Knowledge Representation and Reasoning (KR 2010, conference CORE rank: A\*), pp. 203–213. Toronto, 2010.

## Other international conference papers

1. S. Borgwardt, M. Cerami, R. Peñaloza. *Many-valued Horn Logic is Hard*. In Proceedings of the 1<sup>st</sup> International Workshop on Logics for Reasoning about Preferences, Uncertainty and Vagueness (PRUV 2014), CEUR Workshop Proceedings, Vol. 1205, pp. 52–58. Vienna, 2014.
2. M. Cerami, U. Straccia. *Complexity Sources in Fuzzy Description Logic*. In Proceedings of the 27<sup>th</sup> International Workshop on Description Logics (DL 2014), CEUR Workshop Proceedings, Vol. 1193, pp. 421–433. Vienna, 2014.
3. T. Alsinet, D. Barroso, R. Bejar, F. Bou, M. Cerami, F. Esteva. *On the implementation of a Fuzzy DL Solver over Infinite-Valued Product Logic with SMT Solvers*. In Proceedings of the 7<sup>th</sup> Scalable Uncertainty Management International Conference (SUM 2013), pp. 325–330. Washington DC, 2013.
4. F. Bou, M. Cerami, F. Esteva. *Concept satisfiability in finite-valued fuzzy description logics is PSPACE-complete* (extended abstract). In Proceedings of the Conference on Logic, Algebras and Truth Degrees 2012 (LATD 2012), pp. 44–48. Kanazawa, 2012.
5. M. Cerami, U. Straccia. *Undecidability of Fuzzy Description Logics with GCIs under Lukasiewicz Semantics*. In Proceedings of the 1<sup>st</sup> Workshop

on Weighted Logics for Artificial Intelligence (WL4AI 2012), pp. 51-58. Montpellier, 2012.

6. M. Cerami, F. Esteva, A. García-Cerdaña. *On finitely valued fuzzy description logics: The Lukasiewicz case*. In Proceedings of the 14<sup>th</sup> International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU 2012), pp. 235–244. Catania, 2012.
7. M. Cerami, F. Esteva, F. Bou; *Decidability of a Description Logic over infinite-valued Product Logic* (extended abstract). In Proceedings of the 3<sup>rd</sup> Linz Seminar: Lattice-valued Logic and its Applications, pp. 21–25. Linz, 2010.

### National conference papers

1. M. Cerami, F. Esteva. *Completeness of a PSPACE algorithm for concept satisfiability in finite-valued Fuzzy Description Logics*. In Proceedings of the XVII Congreso Español de Tecnología y Lógica Fuzzy (ESTYLF 2014), pp. 429–434. Zaragoza, 2014.
2. M. Cerami, F. Esteva. *First order SMTL logic and quasi-witnessed models*. In Proceedings of the XV Congreso Español de Tecnología y Lógica Fuzzy (ESTYLF 2010), pp. 145–150. Huelva, 2010.

### Technical reports

1. M. Cerami, U. Straccia. *On the undecidability of fuzzy description logics with GCIs with Lukasiewicz t-norm*. Technical report, Computing Research Repository. Available at <http://arxiv.org/abs/1107.4212>.