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Date of Birth: 17/02/70
Nationality: French

Education

- 2002** Doctorate of Philosophy, University of Aix-Marseille I, France.
Supervised by Pr. Dr. P. Livet.
Title: “Non-monotonic logic and modes of argumentation: the case of conditional obligation”. Obtained with the highest distinction. Chairman: Pr. Paul Gochet.
Best thesis award (see below).
- 1998** DEA (post-graduate degree granted 5 years after the Baccalauréat) in Philosophy, University of Aix-Marseille I, France.
Title: “Possible-worlds semantics for temporal deontic logic”.
- 1992** Master’s degree in Philosophy, University of Aix-Marseilles I, France.
- 1991** *Licence* (three-year university degree) in Philosophy, University of Aix-Marseille I, France.

Professional experience

- 2022-2023** Lisa Meitner FWF (Austrian Science Fund) fellow. Working as PI of the project “Axiomatizing normative conditional reasoning (ANCoR)”, hosted at the Inst. of Logic and Computation, Vienna University of Technology (TU Wien), within Prof. Dr. A. Ciabattoni’s group.
- 2021** Universitätsassistent (senior postdoc), Institute of Logic and Computation, Vienna University of Technology (TU Wien), Austria. Working with Prof. Dr. A. Ciabattoni.
- 2020** Guest Researcher at the *CGG* (Gilles-Gaston Granger) laboratory within the French *CNRS* (National Centre for Scientific Research). Head: Prof. Dr. Tarantino.
- 2009-2019** Postdoc researcher, Department of Computer Science, University of Luxembourg. Working with Prof. Dr. L. Van der Torre.
- 2006-2008** Guest Researcher at the *CEPERC* (Centre for Comparative Epistemology and Ergology) laboratory within the French *CNRS* (National Centre for Scientific Research). Head: Prof. Dr. P. Livet.
- 2002-2005** Research Associate, Department of Computer Science, King’s College, London. Working with Prof. Dr. A.J.I. Jones.
Two posts, each one being part of an EU-funded project.
- 1998-2002** Assistant Lecturer in Philosophy, University of Aix-Marseille I, France.
Preparation and teaching of: An Introduction to Propositional Logic.
Also affiliated with the *CEPERC* laboratory as a PhD student.

- 1998-2002** Assistant Lecturer in Philosophy, University of Aix-Marseille I, France. Preparation and teaching of: *An Introduction to Propositional Logic*. Also affiliated with the *CEPERC* laboratory as a PhD student.
- 1995-1997** Diplomatic attaché responsible for the development of links between French and Vietnamese regions, French Embassy of Hanoi, Vietnam.

Area of expertise

- Symbolic AI, knowledge representation and reasoning. Special focus on normative reasoning (deontic logic).

Awards

- 3 best paper awards: items 49, 41 and 44 in the list of publications.
- Best thesis award 2002 in the Humanities and Social Sciences (price awarded by the Academy of Aix-Marseille).

Scientific highlights

- Resolution of axiomatization problems for 2 families of mainstream systems for conditional obligation. Includes a long standing unsettled problem concerning the so-called preference-based logics for conditional obligation (problem first posed by Åqvist in 1987, and then repeated in 2001 in his chapter for the second edition of the *Handbook of Philosophical Logic*)
- Systematic axiomatic study of the main preference-based systems of conditional obligation (similar to the well-known modal logic cube). Resulted in a chapter in the 2nd volume of the *Handbook of Deontic Logic*.
- Automated reasoning tools for normative reasoning (collaboration with Benzmueller)

Invited talks & tutorials

- Invited talk “New developments in deontic conditional logic”, workshop “Automated reasoning with legal entities” (AURELE), University of Luxembourg, 15-22 Jul 22.
- Invited talk “Preference-based semantics for dyadic deontic logics in Hansson’s tradition: a survey of axiomatisation results”, annual meeting of the Swiss Society for Logic and Philosophy of Science (SSLPS), University of Bern, 24-25 Oct 19.
- Invited tutorial “Normative reasoning”, *KI’19* (42nd German conference on Artificial Intelligence), Kassel, 23-26 Sep 19.
- Keynote speaker at *DEON’16* (13th International Conference on Deontic Logic and Normative Systems), Bayreuth, Germany, 8-21 Jul 16. Talk title: “Preference-based semantics for dyadic deontic logics in Hansson’s tradition: a survey of axiomatisation results”.

Grants

- 2022-23** “Axiomatizing Normative COnditional Reasoning (ANCoR)”, Individual research grant (€177K) awarded by FWF (Austrian Science Fund) under the Lisa Meitner programme. Working as Project Investigator (PI).

- 2018** Luxembourg Logic for AI Summit (LuxLogAI). Conference support grant (€24K) awarded by the FNR (Luxembourg National Funds for Scientific Research). Working as co-PI.
- 2009-10** LogIques for Normative Multi-Agent Systems (LINMAS). Individual research grant (50€) awarded by the FNR (and co-funded by the EU under the Marie Curie scheme). Working as PI.
- 2004-05** EU-funded FP6 Integrated project “TrustCoM” (IST-2002-2.3.1.9). Research grant.
- 2001** (1-year) EU-funded FP5 project “ALFEBIITE” (IST-1999-10298). Research grant.
- 1998-00** Non-Monotonic Reasoning for Argumentation (NMRArg). Individual research grant (€60K) from the French Ministry of Higher Education and Scientific Research. Working as PI.

Publication Summary

Textbook	Co-edition	Keynote	Journal	Chap.	Conf.	Other	Total
1	7	1	16	9	20	2	56

Table 1: Number of publications

Teaching

Deontic logic for normative reasoning (Spring 2022 & 2023, MSc level, Technical University of Vienna)

- ▷ Same content as Intelligent agents 2 below.
- ▷ 2023: part of a joint master in AI with the School of Engineering at Tufts University (USA)

Python (Fall 2019, MSc level, University of Luxembourg)

- ▷ Intro course to programming in python
- ▷ Part of the master in maths, track “Industrial mathematics”
- ▷ The course consisted in frontal lectures, practicals and an individual project. We covered the basic notions and more specialized topics like cryptography
- ▷ Student’s feedback sample attached.

Normative reasoning

- ▷ Tutorial at *KI’19* (42nd German conference on Artificial Intelligence) held in Kassel, 23-26 Sep 19).

Intelligent agents 2 (deontic logic) (Falls 2010-18, MSc level, University of Luxembourg)

- ▷ Gave rise to a textbook, item 1 in the list of publications (reviewed in Zentralblatt (Zbl 07101416)
- ▷ Topics covered: formalisms using norms (deontic logic) and topics from literature on normative multi-agent systems and machine ethics (conflicts between obligations, reasoning about norm violation) ; implementation in Isabelle/HOL

Intelligent agents 1 (Spring 2016, MSc level, University of Luxembourg)

- ▷ Topics covered: knowledge representation, more specifically conditional logics, nonmonotonic logics and belief revision theory

Deontic logic (Spring and Fall 2014, postgraduate level, University of Luxembourg, Computer Science)

- ▷ Guest lectures part of the Ph.D. International Program Erasmus Mundus Law, Science and Technology (<http://www.last-jd.eu>)

Normative multi-agent systems

- ▷ Tutorial at *EASSS'09* (11th European Agent Systems Summer School) held in Torino, 31 Aug - 4 Sep 09). Postgraduate level.

Artificial intelligence (Spring 2009, undergraduate level, University of Luxembourg, Computer Science)

- ▷ The course presented an overview of core AI topics (planning; Prolog; learning)

Propositional Logic (Spring 1998 - Spring 2002, undergraduate level, University of Aix-Marseille I, Philosophy)

- ▷ Teaching assistant - Prof. in charge: A. Michel, Professor of Philosophy at the University of Aix-Marseille I. (I was in charge of the practicals)
- ▷ During this period, I also followed a pedagogical training programme for university teachers

Logic and language (Fall 1995, Graduate level, University of Aix-Marseille I)

- ▷ Part of a Master Program in Language Science, University of Aix-Marseille I, France

Co-supervision of students

Acted as daily supervisor.

Resulted in:

- 8 joint papers (1 under review): items 10, 12, 13, 40, 41, 44, 46 and 57 in the list of publications.
- 2 best paper-awards: 41 and 44.
- 1 best master award (see below).

PhD

2022- Dominik Pichler, TU Wien, Logic and Theory group. Topic: 1st-order deontic logic. Co-supervised with Prof. Ciabattoni.

2021-2022 Maya Olszewski, TU Wien, Logic and Theory group. Topic: deontic logic. Co-supervised with Prof. Ciabattoni. Resulted in paper 57. (Now high-school teacher)

2016-20 Ali Farjami, University of Luxembourg, Department of Computer Science. PhD title: *Discursive Input/output Logic*. Award date: 1 Oct 2020. Co-supervised with Prof. van der Torre. Resulted in papers 10, 12, 13 and 41.

2013-17 Diego Ambrossio, University of Luxembourg, Department of Computer Science. PhD title: *Non-Monotonic Logics for Access Control: Delegation Revocation and Distributed Policies*. Award date: May 2017. Now in industry (name of the company: LuxAI). Co-supervised with Prof. van der Torre. Resulted in paper 46.

2012-16 Xin Sun, University of Luxembourg, Department of Computer Science. PhD

title: *Logic and Games of Norms: a Computational Perspective*. Award date: July 2016. Co-supervised with Prof. van der Torre.

Master

2022 Dominik Pichler, TU Wien, Logic and Theory group. Master title: *Extensionality for Obligations in Åqvist's System F*. Co-supervised with Prof. Ciabattoni.

2019 Maya Olszewski, University of Luxembourg, Department of Computer Science. Master title: *Exploring Permission in I/O Logic*. Award date: 26 Aug 2019. Co-supervised with Prof. van der Torre. Resulted in papers 40 and 57.

****Best master thesis in the Faculty of Science ****

2018 Paul Meder, University of Luxembourg, Department of Computer Science. Master title: *Deontic Agency and Moral Luck*. Award date: 3 Sep 2018. Now high-school teacher. Co-supervised with Prof. van der Torre. Resulted in paper 13.

2016 Zohreh Baniasadi, University of Luxembourg, Department of Computer Science. Master title: *STIT Logic for Machine Ethics With IDP Specification*. Award date: 12 May 2016. Now in industry (name of the company: Zortify). Co-supervised with Prof. van der Torre. Resulted in paper 44.

Defense committees

In addition to being on the defense committee of all the students mentioned above, I was appointed as external reader of the PhD defence of Stef Frijters, University of Ghent. Title: *Doctors have an Obligation to Care for their Patients: Term-Modal Logics for Ethical Reasoning with Quantified Deontic Statements*. Viva date: 21 Oct 2021.

Pedagogical training

2016 Workshop on the supervision of PhD students, leading to a certificate (issued by the University of Luxembourg).

2002 Pedagogical training programme for university teachers leading to a certificate called "Monitorat" (issued by the University Aix-Marseille I, France).

Co-organisation of conferences and workshops

Luxembourg Logic for AI Summit (LuxLogAI), 17-26 Sep 2018.

<https://luxlogai.uni.lu> Number of attendees: 226. Co-organised with L. van der Torre, C. Benz Müller and M. Theobald. LuxLogAI combined three main events:

- 2nd Joint International Conference on Rules and Reasoning (RuleML+RR 2018)
- 4th Global Conference on Artificial Intelligence (GCAI 2018)
- 14th Reasoning Web Summer School (RW 2018)
- Mirel 2018 (Mining and REasoning with Legal texts)

30th International Conference on Legal Knowledge and Information Systems (JURIX 2017) 13-15 Dec 2017, Luxembourg. Co-organized with G. Casini.

10th de Morgan workshop on deontic logic, 5 & 6 July 10, Firenze

9th de Morgan workshop on deontic logic, 1-4 Dec 09, Luxembourg

Workshop on logic/argumentation, 18 Dec 00, University of Aix-Marseille I

Other academic responsibilities and services

- Co-editor of the *Handbook of Deontic Logic and Normative Systems* (2 volumes)
- Co-editor of the textbook series *Texts in Logic and Reasoning*, published by College Publications.
- RuleML+RR 2018 general chair.
- PC co-chair
 - 12th International Conference on Deontic Logic and Normative Systems (DEON 2014), 12-15 July 2014, Ghent, Belgium. <http://www.deon2014.ugent.be>
 - Mirel 2017 (Mining and Reasoning with Legal Texts)
- PC member
 - NMR 2021-2022; ARQNL 2022 ; CLAR 2021; DEON 2020-21
 - VCLA 2021-2022 Awards for Bachelor and Master thesis
 - AAI 2019 - 21 (the 33nd - 35th AAI Conference on Artificial Intelligence)
 - DEON (International Conference on Deontic Logic in Computer Science) 2010 to 2021
 - MIREL 2019 (MIning and REasoning with Legal texts)
 - AiML 2020 (Advances in Modal Logic) 17-21 August 2020, University of Helsinki
 - KI2019 Doctoral consortium (42nd German Conference on AI), 23-26 Sep 2019, Kassel, Germany
 - AAMAS (International Conference on Autonomous Agents and Multiagent Systems) 2019-20
 - IJCAI (International Joint Conference on Artificial Intelligence) 2018-20
 - ECAI (European Conference on Artificial Intelligence) 2018
 - GCAI (Global Conference on Artificial Intelligence) 2017-19
 - Mirel (Mining and Reasoning with Legal Texts) 2017 and 2018
 - CLIMA XV, Prague, 18-19 Aug 2014; CLIMA XIV, Corunna, Spain, 16-18 Sep 2013
 - RDA2@ECAI'12, Right and duties of Autonomous Agents, ECAI'12 workshop
 - Festschrift of Marek Sergot 2012
 - 23rd Benelux Conference on Artificial Intelligence (BNAIC 2011)
 - Agent Communication 2010, in conjunction with AAMAS 2010
 - ArgMAS (International Workshop on Argumentation in Multi-Agent Systems) 2004 to 2007
 - BNAIC (Benelux Conference on Artificial Intelligence) 2010
 - NorMAS 09 (Normative Multi-Agent Systems 2009)
- Research project evaluation for *The Netherlands Organisation for Scientific Research (NWO)*.
- Regular reviewer for *Zentralblatt für Mathematik* and *Mathematical Reviews*.
- Reviewer for approx. 15 refereed academic journals, including *Artificial Intelligence* and *Artificial Intelligence and Law*. Sub-reviewer for 10 conferences and international workshops (including KR, Concur, Tark and WoLLIC).