Curriculum Vitae

Gianluigi Bellin

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1 Personal Data, Affiliations, Education, Specialization

- Family address: Gianluigi Bellin, Borgo Berga 9, 36100 Vicenza, Italy

  Phone: (+39) 0444 545 834

  Citizenship: Italian.

1.1 Affiliations and Institutional Addresses

- Since April 1998: University of Verona, Faculty of Science; research fellow in Mathematical Logic (permanent position, part-time since 2001).

  Address: Università degli Studi di Verona,
  Facoltà di Scienze Matematiche, Fisiche e Naturali,
  Strada Le Grazie, Ca' Vignal 2,
  37134 Verona (ITALY)
  Telephone: [+39] 045 802 7969 Fax: [+39] 045 802 7928

- Since January 2001: Queen Mary, University of London, Department of Computer Science; senior lecturer in logic (part time position).

  Address: Queen Mary, University of London,
  Department of Computer Science
  Mile End Road
  London E1 4NS (UNITED KINGDOM)
  Telephone: [+44] 207 882 5200 Fax: [+44] 208 980 6533

- Web Page: http://profs.sci.univr.it/~bellin

1.2 Education

- Ph.D. in Philosophy, Stanford University, USA, 1990. Advisor: Prof. S. Feferman.

- Visiting student in a PhD program in Philosophy at the University of Stockholm, Sweden, 1978. Advisor: Prof. D. Prawitz.

- Laurea in Philosophy, University of Padova, Italy, 1976.

- Diploma in Piano, Conservatorio di Padova, Italy, 1968.

1.3 Areas of Specialization

- Logic, especially Proof Theory.
- Theoretical Computer Science.
- Philosophy of Logic.

2 Teaching

- Computability DCS 301 (Queen Mary University of London, since 2001)
  (*3rd year undergraduate and Masters level course* in Computer Science)

  Topics: Abstract computation models and their limitations. 0. Mathematical prerequisites, Russell's paradox, Cantor's theorem and diagonalization techniques. 1. Automata, regular languages, "pumping lemma", context-free grammars. 2. Primitive recursive functions, Ackermann's function, μ-operator and partial recursive functions. 3. Turing machines and register machines. 4. Equivalence of the classes of Turing computable functions and of partial recursive functions. Church thesis. Recursive and recursively enumerable sets.

- Automated Deduction (Università di Verona, 2004, 2006)
  (*4th and 5th year course, for a Masters level degree in Computer Science*)

  Topics: Semantic tableaux methods for modal logics; dynamic logic. 1. Gentzen systems and semantic tableaux methods for classical propositional logic and modal logics **K**, **KD**, **K4**, **GL**, **T** and **S4**. Soundness and Completeness theorems for Kripke semantics. 2. Propositional Dynamic Logic: syntax, semantics and completeness theorem. 3. The system MAUDE: implementation of semantic tableaux algorithms in MAUDE.

- Computational Logic (Università di Verona, 2005, 2007)
  (*4th and 5th year course, for a Masters level degree in Computer Science*)

  Topics: The Curry Howard correspondence between intuitionistic logic and the Simply Typed lambda calculus. 1. Gentzen calculus of sequents and natural deduction for intuitionistic propositional logic. 2. The simply typed lambda calculus: basic definitions, Church-Rosser property, representation of recursive functions, weak normalisation theorem, strong normalisation theorems. 3. Topics in the semantics of intuitionistic logic and the λ-calculus.

- Computational Complexity (Università di Verona, 1999)
  (*3rd year undergraduate course in Computer Science*)

  Topics: Fundamental notions of computational complexity. Definition of a complexity class, properties of the main complexity classes. Cook's theorem. Examples of **NP**-complete problems. Pratt's theorem: PRIMES is in $\mathbf{P} \cap \mathbf{NP}$.

Note: Before the introduction of the quarter system in 1999, my course at the University of Verona was six months long and included topics from the above indicated Automated Deduction, Logic and Computational Complexity courses.

- Introduction to logic, Philosophy 12 A. (University of California at Berkeley, 1998) (*undergraduate course in Philosophy*)

  Topics: first order logic, syntax, semantics, pragmatics; formalisation of natural language statements and informal arguments; propositional and first-order logic; formal syntax; truth-functional semantics; semantic tableaux and natural deduction systems for propositional and first order logic; Gödel's completeness theorem *via* semantic tableaux.

- Advanced Logic – Proof Theory. (Oxford University, Autumn 1992)
  Lecture course for the Joint Honour School of Mathematics and Philosophy; final year undergraduate and first year graduate levels.

  Topics: Gentzen's calculi; unprovability in Peano Arithmetic of various true statements in the language of arithmetic, in particular the Paris-Harrington-Ramsey Theorem and Goodstein's Theorem.

- Philosophy of Mathematics. (Oxford University, Winter 1993)
  Lecture course for the Joint Honour School of Mathematics and Philosophy; undergraduate level.

  Topics: The interaction between mathematical practice and the philosophy of mathematics, in particular: problems of the continuum, from Berkeley's criticism to Dedekind's definition of the real numbers; Kant's philosophy of mathematics; logic as a foundation of mathematics (Frege, Dedekind, Peano, Russell) and Poincaré's criticisms of it; the development of set theory (Cantor, Zermelo); Gödel's Platonism; Brouwer's intuitionism; Hilbert's programme; anti-foundational philosophies of mathematics.

PhD Supervisions:

- Kurt Ranalter (2002-07) PhD thesis on *A categorical semantics for an intuitionistic logic of pragmatics with assertions, obligations and causal implication* (defence expected by June 2007).
  Thesis developed as part of an international co-tutoring program between Queen Mary, University of London and the Universitá di Verona; joint supervision with Dr Graham White, Queen Mary University of London.

- Corrado Biasi (2004-) PhD thesis on *Polarised bi-intuitionistic logic*, Queen Mary, University of London (defence expected by June 2008).

Supervision of "tesi di laurea" (5 years program), Università di Verona.

- Dr Corrado Biasi. *Verso una logica degli operatori prammatici: Asserzioni e Congetture* (March 2003).

- Dr Kurt Ranalter. *Una semantica di Kripke per la logica intuizionistica della prammatica ILP* (September 2001).

- Dr Nicola Piccinini. *Tecniche di teoria della dimostrazione per l'identificazione di prove della Logica Classica* (April 2001).

- Dr Roberto Bonato. *A Study of Learnability for Rigid Lambek Grammars* (September 2000), joint supervision with Dr Christian Retoré, Université de Rennes 1.

- Dr Francesco Bellomi. *A pattern-based proof-search language*, September 2000, joint supervision with Prof Anatol Slissenko, Université de Paris 12.

Other teaching experience:

- Proof theory and the λ-calculus. (Università di Siena, Department of Mathematics. Graduate course, Spring 1996.)
- Proof Nets and the Typed λ-calculus. (Edinburgh University, Department of Computer Science, short course, Summer 1992)
- Seminar on Linear Logic (Stanford University, Department of Computer Science, 10 lectures, Winter 1989)
- Activity as a Teaching Assistant in courses at Stanford University:

(i) (computer-aided course) Introduction to Logic (*Prof Pat Suppes*); five terms from Autumn 1981 to Winter 1984

(ii) First Order Logic (*Prof Wilfried Sieg*); Winter 1982.

(iii) Aesthetics (*Prof Arnold Davidson*); Winter 1983.

(iv) Political Philosophy (*Prof A.Piper*); Spring 1983.

- Teaching Music Education in Junior High Schools, Vicenza and Padua (1970-80).

3 Research

3.1 Papers.

3.1.1 Journal Papers

1. G. Bellin, M. Hyland, E. Robinson and C. Urban. Categorical Proof Theory of Classical Propositional Calculus *Theoretical Computer Science*, Vol.364, n.2, November 2006, pp. 146-165.
2. G. Bellin and C. Biasi. Towards a logic for pragmatics: Assertions and conjectures, In: *Journal of Logic and Computation*, Volume 14, Number 4, 2004, pp. 473-506.
3. G. Bellin and K. Ranalter. A Kripke-style semantics for the intuitionistic logic of pragmatics ILP, *Journal of Logic and Computation*, vol.13, n.5, 2003, pp.755-775
4. G. Bellin and A. Fleury. Planar and Braided Proof-nets for MLL with Mix, *Archive for Mathematical Logic*, 37, 1998, pp.309-325.
5. G. Bellin. Subnets of Proof-nets in multiplicative linear logic with MIX *Mathematical Structures in Computer Science* vol.7, 1997, pp.663-699.
6. G. Bellin and P. J. Scott. On the Pi-calculus and linear logic, *Theoretical Computer Science* vol.135, 1994, pp.11-65

7. G. Bellin and J. Ketonen. A decision procedure revisited: Notes on direct logic, linear logic and its implementation, *Theoretical Computer Science*, vol.95, 1992, pp.115-142

8. G. Bellin. A system of natural deduction for GL *Teoria* vol.60, n.2, 1985, pp.89-114.

3.1.2 Journal Paper - Submitted

- G. Bellin. Natural deduction and a distributed term assignment for dual intuitionistic logic. Submitted to the *Annals of Pure and Applied Logic*, December 2006.

3.1.3 Contributions to books.

1. G. Bellin. Chu's Construction: A Proof-theoretic Approach. In Ruy J.G.B. de Queiroz editor, *Logic for Concurrency and Synchronisation*, Kluwer Trends in Logic n.18, 2003, pp.93-114.

2. G. Bellin. Two paradigms of logical computation in Affine Logic? In Ruy J.G.B. de Queiroz editor, *Logic for Concurrency and Synchronisation*, Kluwer Trends in Logic n.18, 2003, pp.115-150.

3. G. Bellin and C. Dalla Pozza. A pragmatic interpretation of sub-structural logics in *Reflections on the Foundations of Mathematics, Essays in Honour of Solomon Feferman,* W. Sieg, R. Sommer and C. Talcott eds. ASL Lecture Notes in Logic ; 15, 2002.

4. G. Bellin and J. van de Wiele. Subnets of Proof-nets in **MLL-**. In: *Advances in Linear Logic* J-Y. Girard, Y. Lafont and L. Regnier eds. London Mathematical Society Lecture Note Series 222, Cambridge University Press 1995

5. G. Bellin. Ramsey Interpreted: A Parametric Version of Ramsey's Theorem. In: *Logic and Computation: Proceedings of a Symposium held at Carnegie-Mellon University* Contemporary Mathematics 106, AMS, 1990, pp.17-37.

6. G. Bellin. Herbrand's Theorem for Calculi of Sequents LK and LJ. In: *Proceedings of the Fifth Scandinavian Logic Symposium*, Aalborg University Press, 1979, pp.285-300.

3.1.4 Conference papers

1. G. Bellin. A Term Assignment for Dual Intuitionistic Logic, conference paper presented at the *Intuitionistic Modal Logic and Application* LICS'05-IMLA'05 Workshop, Chicago, IL, June 30, 2005

2. G. Bellin. Towards a formal pragmatics: an intuitionistic theory of assertive and conjectural judgements with an extension of Gödel, McKinsey and Tarski's S4 translation, conference paper presented at the *Intuitionistic Modal Logic and Application* IMLA-FLOC'02 workshop, Copenhagen, 2002.

3. G. Bellin, V. de Paiva and E. Ritter. Extended Curry-Howard Correspondence for a Basic Constructive Modal Logic, conference paper presented at the conference *Methods for Modalities, 2*, Institute for Logic, Language and Computation, University of Amsterdam November 29-30, 2001.

3.1.5 Theses

- *Mechanising Proof Theory. Resource-Aware Logics and Proof Transformation to Extract Implicit Information*, PhD thesis, Department of Philosophy, Stanford University, June 1990,
  Advisor: Prof Solomon Feferman. Reading Committee: S. Feferman, J. Ketonen and C. Talcott.

- *Il teorema di Completezza nella Logica del '900*, Tesi di Laurea, Facoltà di Filosofia, Università di Padova, 1976
  Advisor: Prof Umberto Curi.

3.2 Organization of Research

3.2.1 Organization of Conferences and Workshops

- *Workshop on Proof Theory and Algorithms*,
  ICMS Edinburgh, 23-29 March 2003.
  http://www.icms.org.uk/archive/meetings/2003/proof/index.html
  Scientific Organizing Committee: Gianluigi Bellin, Martin Hyland, Ulrich Kohlenbach, Angus Macintyre.

- *First Workshop on the Logic for Pragmatics*
  Università di Verona, September 1-5, 2003
  http://profs.sci.univr.it/˜bellin/workshop/logprag.html
  Scientific Organizing Committee: Gianluigi Bellin, Tristan Crolard, Carlo Dalla Pozza, Graham White.

- *Second Workshop on the Logic for Pragmatics* (satellite event to WoLLIC 2004) LACL, University of Paris 12, Créteil, France, July 23-24, 2004
  http://www.univ-paris12.fr/lacl/WoLP04/
  Scientific Organizing Committee: Gianluigi Bellin, Tristan Crolard, Carlo Dalla Pozza, Claudio Garola, Christian Retoré, Graham White.

- *6th Workshop on Logic, Language, Information and Computation* (WoLLIC'99), Rio de Janeiro, May 25-28, 1999
  http://www.cin.ufpe.br/˜wollic/wollic99/
  Programme Committee: Gianluigi Bellin (chairperson).

3.2.2 Organization of International Cooperation

- *Cooperation Agreement* between the *Università di Verona*, the *Université de Paris 12*, the *Université de Rennes 1*, *Queen Mary and Westfield College, University of London*, the *Universidade Federal de Pernambuco* and the *Universidad de La Habana* for the creation of an Internationally Cotutored PhD Program in Computer Science with specialization in Logics and Formal Methods for Computer Science.

Organizer: Prof Roberto Giacobazzi, co-organizer: Dr Gianluigi Bellin
The agreement was signed on April 5, 2001 by the above Universities and received funding for 242.000.000 Italian lire (about 120.000 euros) from the *Interlink* program of the Italian MURST and the University of Verona, matched by fellowships offered by the Université de Paris 12, the Université de Rennes 1 and Queen Mary and Westfield College, University of London.
The agreement was extended between the University of Verona and Bordeaux in December 2002.
The doctoral students Roberto Bonato and Kurt Ranalter have participated in the program.

(i) Dr Roberto Bonato, under the supervision of Prof Denis Delfitto (Verona) and Prof Christian Retoré (Bordeaux), has received his PhD from the University of Verona and the Université de Bordeaux in 2006.

(ii) Kurt Ranalter, under the supervision of Dr Gianluigi Bellin (Verona) and Graham White (QMUL), is expected to defend his PhD thesis in 2007 at Queen Mary, University of London and at the University of Verona.

- A similar cooperation agreement was established between the University of Turin and Queen Mary University of London in 2006.

3.3 Other professional functions

3.3.1 Journal Editor

2006- Special issue of *Fundamenta Informaticae* with papers from the Workshops on Logic for Pragmatics.
Editors: Gianluigi Bellin, Stefano Berardi (Universitá di Torino), Tristan Crolard (Université de Paris 12).

3.3.2 Refereeing of articles for journals and conferences

2005: for the conference *Mathematical Foundations of Programming Semantics*, Phil Scott editor.

2004: for the *Journal of Logic and Computation*, Jane Spurr editor.

1999: for the *Bulletin of the Interest Group in Pure and Applied Logics*, Ruy de Queiroz editor.

1998: for the *Journal of Symbolic Logic*, Michael Rathjen editor.

1995: for *Mathematical Structures in Computer Science*. Phil Scott editor.

1995: for the *Bulletin of the Interest Group in Pure and Applied Logics*, Ruy de Queiroz editor.

1994: for *Mathematical Structures in Computer Science*, Ugo Montanari editor.

1993: for *Formal Aspects of Computing*, Robin Milner editor.

1992: for the conference *Logic in Computer Science* 1993, Jose Meseguer editor.

1992: for the *Journal of Logic and Computation*, Robin Milner editor.

1992: in the book *Logical Environments*, G.Huet and G.Plotkin editors, CUP, 1993.

3.4 Participation to Conferences, Workshops and Invited Talks

- research report in the final workshop of the project *ProToCoLLo*, 15-17 September 2004, Torino, Italy
- invited talk at the international conference *Natural Deduction Rio 2001* in honour of Dag Prawitz, Rio de Janeiro, July 2-6, 2001.
- invited talk at the *Dagstuhl Seminar* n.01141 on *Semantic Foundations of Proof-Search*, April 1-6, 2001, Schloss Dagstuhl (D.Pym, E.Ritter and T.Streicher organizers)
- invited talk at the *Dagstuhl Seminar* n.99341 on *Linear Logic and Applications*, August 22-27, 1999, Schloss Dagstuhl (V.de Paiva, J.van Genabit and E.Ritter organizers)
- invited speaker at the conference *Logic for Concurrency and Synchronization*, University of Recife, March 4-6, 1998
- invited talk at the *Workshop on Linear Logic and Applications*, Cambridge, UK, October 16-18, 1995
- contributed paper to the *10th International Congress of Logic, Methodology and Philosophy of Science*, Firenze, Italy, August 19-25, 1995
- contributed paper at the *Logic Colloquium 95*, Haifa, Israel, August 9-17, 1995
- research report in the *BRA workshop*, Villa Gualino, Torino, Italy, 5-8 June, 1995
- research report in the *Terzo Convegno Italiano di Logica Lineare*, Monselice, Padova, Italy, October 13-15, 1994.
- contributed paper to the *International Conference on Logic and Algebra in memory of Roberto Magari* Pontignano, Siena, Italy, April 26-30, 1994
- contributed paper to the *International Workshop on Linear Logic*, Mathematical Science Institute, Cornell University, Ithaca, NY, June 14-18, 1993
- contributed paper to the *European Proof Theory Seminar* Oxford UK, January 14-16, 1993
- (with P.Scott) invited talk to the conference *Mathematical Foundations of Programming Semantics* University College Oxford, April 7-11, 1992
- contributed paper to the *European Proof Theory Seminar* Oxford UK, January 16-18, 1992
- contributed paper to the *Primo Convegno Italiano di Logica Lineare*, Pontignano, Siena, 10-12 Gennaio 1992.
- contributed paper to the *9th International Congress of Logic, Methodology and Philosophy of Science*, Uppsala, Sweden, August 7-14, 1991

- contributed paper to the *5th Jumelage Meeting on the Typed Lambda Calculus*, Paris, France, February 1-6, 1991
- contributed paper to the *Logic Colloquium 1998*, Padova, Italy, August 1988
- contributed paper to the *Symposium on Logic and Computation*, Carnegie-Mellon University, June 30-July2, 1987
- contributed paper to the *5th Scandinavian Logic Symposium*, Aalborg, Denmark, January 17-19, 1979

3.5 Invited talks

- Stanford Research Institute, Theory group seminar.
  3 January 2006: A term assignment for dual intuitionistic logic.
- Università di Padova, Dipartimento di Filosofia, Seminario di Logica e Filosofia analitica,
  28 April 2003: Asserzioni e Congetture. Verso una logica della prammatica.
- University of Leeds, Department of Pure Mathematics, Mathematical Logic Seminar,
  20 March 2002: Towards a formal pragmatics
- Università di Torino, Dipartimento di Informatica,
  26 February 2002: Verso una teoria formale della prammatica
- Università di Padova, Dipartimento di Filosofia, Seminario di Logica e Filosofia analitica,
  29 October 2001: Asserzioni, obbligazioni e causalità. (with Carlo Dalla Pozza)
- Università di Padova, Dipartimento di Matematica,
  19 May 2000: Interpretazioni prammatiche della logica lineare.
- Università di Torino, Dipartimento di Informatica,
  12 May 1999: A survey of Java programs for automated deduction (*visual lambda calculus*), developed in the project *Theorem Prover Verona.*
- Pontificia Universidade Católica do Rio de Janeiro, Departamento de Filosofia,
  10 March 1998: On the problem of identity of proofs.
- Université de Montpellier, LIRMM,
  11 December 1997: Two paradigms of logical computation in Affine Logic.
- Università di Padova, Dipartimento di Matematica,
  14 November 1997: Chu's construction: A proof-theoretic approach.
- Università di Torino, Dipartimento di Informatica,
  23 October 1997: Two paradigms of logical computation in Affine Logic.
- Università di Udine, Dipartimento di Informatica,
  30 May 1997: Planar and Braided Proof-Nets.
- Università di Torino, Dipartimento di Informatica,
  29 May 1997: On the problem of identity of proofs.
- University of Leeds, Department of Pure Mathematics, Mathematical Logic Seminar,
  14 May 1997: Planar and Braided Proof-Nets.
- University of Stanford, Department of Mathematics,
  17 January 1997: The problem of identity of proofs – after linear logic.

- Stanford Research Institute, Computer Science Laboratory,
  20 November 1996: Towards braided proof nets.
- University of California at Berkeley, Group in Logic and the Methodology of Science,
  15 November 1996: Philosophical issues in linear logic.
- University of California at Berkeley, Group in Logic and the Methodology of Science, Logic Colloquium,
  11 October 1996: Ramsey Interpreted: a parametric version of Ramsey's Theorem.
- Paris, École Normale Supérieure,
  2 April 1996: Braided Proof-Nets for Multiplicative Linear Logic with Mix.
- Paris, Équipe de Logique, Université de Paris VII,
  26 June 1995: Extraction d'information implicite dans les preuves en logique classique: la cas des théorèmes de Ramsey.
- New York, Columbia University,
  9 February 1995: Truth, meaning and partial information: the contribution of linear logic.
- Paris, École Normale Supérieure,
  25 May 1994: On the π calculus and linear logic.
- Pisa, Dipartimento di Informatica, Università di Pisa,
  6 April 1994: On the π calculus and linear logic.
- Venezia, Dipartimento di Filosofia e teoria delle scienze, Università di Venezia,
  29 March 1994: Ketonen's proof-checker EKL, direct logic and Girard's linear logic.
- Bologna, Dipartimento di Informatica, Università di Bologna,
  29 October 1993: Logica linear con Mix: le tradizioni di Stanford, di Parigi e il recente contributo di A.Asperti.
- Cambridge, Computing Laboratory, University of Cambridge,
  22 October 1993: On additive boxes and on Retoré's logic.
- Torino, Dipartimento di Scienza dell'Informazione, Università di Torino,
  23 April 1993: On proof-nets and typed λ-calculus.
- Udine, Dipartimento di Matematica ed Informatica, Università di Udine,
  22 April 1993: On linear logic and the π-calculus.
- Oxford, Computing Laboratory, University of Oxford,
  4 March 1993: On linear logic, and abstract languages for concurrent computation.
- Oxford, Mathematical Institute, University of Oxford,
  16 October 1992: Proof-nets and their orientations to represent typed λ-calculus.
- Paris, Équipe de Logique, Université de Paris VII,
  29 April 1992: On proof nets for **MLL**, **LC** and on the representation of linear λ-terms.
- Cambridge, Computing Laboratory, University of Cambridge,
  20 January 1992: Proof nets for classical logic.
- Leeds, Department of Pure Mathematics, University of Leeds,
  18 October 1991: Intuitionistic linear logic and combinatorial proofs of strong normalization.
- Stanford, Department of Computer Science, Stanford University,
  3 July 1991: On Abramsky's computational interpretation of linear logic.

- Stanford Research Institute,
  1 July 1991: A categorical model of classical logic **LC**.
- Stanford, Department of Computer Science, Stanford University,
  26 June 1991: On Girard's paper "A new constructive logic: classical logic".
- St. Andrews, Department of Mathematics and Computer Science, University of St. Andrews, Scotland UK,
  9 May 1991: Proof nets for multiplicative and additive linear logic.
- St. Andrews, Department of Logic and Metaphysics, University of St. Andrews, Scotland UK,
  8 May 1991: Linear logic, a resource-aware approach to relevance.
- Edinburgh, Department of Philosophy, University of Edinburgh,
  15 February 1991: Linear logic, a resource-aware approach to relevance.
- Oxford, Mathematical Institute, University of Oxford,
  25 January 1991: Proof-nets for multiplicative and additive linear logic.
- Cambridge, Computer Laboratory, University of Cambridge,
  23 January 1991: Proof-nets for multiplicative and additive linear logic.
- Roma, Dipartimento di Informatica e Sistemistica, Università La Sapienza,
  21 December 1990: On applications of linear logic to artificial intelligence.
- Padova, Dipartimento di Storia della Filosofia, Università di Padova,
  12 December 1990: On Propositions-as-Types Interpretations of Linear Logic.
- Padova, Dipartimento di Storia della Filosofia,
  11 December 1990: On linear logic and theories of meaning-as-use.
- Padova, Laboratorio LADSEB del Centro Nazionale delle Ricerche,
  1-31 July 1990: series of lectures on linear logic and its possible applications to artificial intelligence.
- Oxford, Mathematical Institute, University of Oxford,
  September 1988: Resource-aware logics: direct logic and linear logic.
- Oxford, Mathematical Institute, University of Oxford,
  September 1988: Unwinding the infinite Ramsey Theorem.
- Roma, Dipartimento di Informatica e Sistemistica, Università La Sapienza,
  September 1988: Resource-aware logics: direct logic and linear logic.
- Milano, Dipartimento di Informatica, Università di Milano,
  September 1988: Unwinding the infinite Ramsey Theorem.
- Trento, Istituto per la Ricerca Scientifica e Tecnologica,
  September 1988: Resource-aware logics and their applications to automatic proof-checking.
- Udine, Dipartimento di Matematica, Università di Udine,
  Winter 1986: Experiments in automatic theorem proving: the proof-checker EKL.
- Trento, Dipartimento di Matematica, Università di Trento,
  Winter 1986: Experiments in automatic theorem proving: formal representations of permutations and the pigeon-hole principle in the Proof-Checker EKL.
- Stanford, Department of Mathematics, Stanford University,
  Winter 1982: Cut elimination for provability logic **GL**.
- Stanford, Department of Mathematics, Stanford University,
  Winter 1981: Herbrand' s theorem for intuitionistic logic **LJ**.

4 Languages

- Italian (native speaker)
- English (second language)
- French (fluent)
- German (some reading capacity)
- Latin (reading capacity)
- Ancient Greek (some reading capacity)