

Curriculum Vitae

Giovanni Curi

Last updated: January 11, 2016; see also <http://www.giovannicuri.com/>

1 Qualifications

- 2014 National scientific qualification (abilitazione scientifica nazionale), associate professor, by the Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR), Italy.
<https://abilitazione.cineca.it/ministero.php/public/esito/settore/01%252FA1/fascia/2>
- 2014 Master in Project Design.
- 2007 *Qualification aux fonctions de maître de conférences en Mathématiques* from the *Conseil National des Universités*, France, 31.01.2007.
- 2004 Ph.D. Degree *with excellence* in mathematical logic and theoretical computer science, from the Department of Mathematics, University of Siena.
- 1998 Degree in Mathematics, University of Padova.

2 Academic awards

- 2011 *Kurt Gödel Research Prize Fellowship 2010 - Silver Medal* (post-doc category: within ten years after Ph.D. degree).
- 2010 *Fubini Award* nomination.
- 2006 *Italian Association of Logic and its Applications Award* for the best Ph.D. thesis in mathematical logic in the period 2003-2005.
- 2001 *Italian Association of Logic and its Applications Award* for the best *tesi di laurea* in mathematical logic in the period 1998-2000.

3 Academic and non-academic employment history, main research fellowships

Non-academic positions:

- 2015 *Research scientific manager* (PE domain), University of Padova.
- 2015 Editor and curator of *Quaderni di ricerca sull'artigianato*, Il Mulino.
- 2014 Contractor for *Centro Studi Sintesi*.
- 2013 External collaborator for *Zanichelli Editore*.

Academic positions won in competitions **with ranking** open to candidates working in any area of mathematics:

- 2011 Two-year senior research associate position (*assegno di ricerca senior*), Department of Mathematics, University of Padova. **Ranked first.**
- 2004 Two-year post-doctoral position, Department of Mathematics, University of Padova. **Ranked first.**

Positions for research in the area of mathematical logic (**without ranking**):

- 2010 Six-month research associate position (*assegno di ricerca*), Department of Computer Science, University of Verona (position interrupted after two months due to the commencement of a new position).
- 2010 Three-month research contract from the Department of Mathematics, University of Padova.
- 2009 Six-month research associate position (*assegno di ricerca*), Department of Computer Science, University of Verona.
- 2008 One-year research associate position (*assegno di ricerca*), Department of Computer Science, University of Verona.

Other grants:

- 2010 Five-month research grant from the Department of Applied Psychology, University of Padova.
- 2005 Grant from the “Fondazione Gini” for a six-month visit to the School of Computer Science of the University of Birmingham (UK).
- 1999 Four-year Ph.D. scholarship from the Department of Mathematics, University of Siena.
- 1999 Four-month grant from the project “Metodi costruttivi in topologia, algebra, e analisi dei programmi” of the “Ministero dell’università e della ricerca scientifica”.

I have also often been supported by grants from the National Institute of High Mathematics (I.N.D.A.M., G.N.S.A.G.A group), and other foreign institutions, for participating in international conferences and meetings.

4 Invited lectures, invited seminars, talks at international meetings

Invited lectures and invited talks

- 2012 “Continuity, Computability, Constructivity From Logic to Algorithms”, special session in honour of Dieter Spreen’s 65th Birthday. Trier, Germany, June 2, 2012. Invited by the the CCC-2012 organising team.

Title: *The uniform objects in constructive set theory.*

2010 “Workshop on Constructive Aspects of Logic and Mathematics”, Kanazawa, Japan, March 8-12, 2010. Invited by Hajime Ishihara and Takako Nemoto.

Title: *Intuitionistic theorems that fail constructively.*

2009 “Continuity, Computability, Constructivity: From Logic to Algorithms”, Koeln, Germany, July 14-18, 2009. Invited by Dieter Spreen.

Title: *Imaginary locales.*

2009 “Leeds Symposium on Proof Theory and Constructivism”, University of Leeds, UK, 3 - 16 July 2009. Invited by Laura Crosilla, Michael Rathjen, Stan Wainer.

Title: *Imaginary locales.*

2008 “Advances in Constructive Topology and Logical Foundations”, conference on the occasion of Giovanni Sambin’s 60th birthday, held in Padova, (Italy), 8-11 October 2008. Invited by C. Faggian, M. E. Maietti and P. Schuster.

Title: *A cocomplete extension of the category of formal topologies.*

2008 “Workshop on Constructivism: Logic and Mathematics”, Kanazawa (Japan) 26 - 30 May 2008. I could not participate for circumstances outside my control. Invited by H. Ishihara and J. Berger.

2007 “Third Workshop on Formal Topology”, Padova (Italy), 7-12 May 2007. Invited by T. Coquand, G. Sambin, and P. Schuster.

Title: *All the constructive compactifications of a frame.*

2006 “Trends in constructive mathematics”, Chiemsee (Germany) June 19-23, 2006. Invited by J. Berger, D. Pattinson, P. Schuster, J. Zappe.

Title: *On some peculiar aspects of the category of formal spaces.*

2005 “20th Summer Conference on Topology and its Applications”. July 10-14, Dennison University, Ohio. Invited by D. Spreen.

Title: *Exact approximations to Stone-Čech compactification.*

2004 Workshop “Computability on Hierarchies and Topological Spaces”, Siena, July 19-24, 2004.

Title: *Effective topology via formal spaces and their inverse limits.*

Invited seminars

2011 Kurt Gödel Research Center, Vienna (Austria), invited by Sy Friedman, April 27, 2011.

Title: *Independence results in constructive set theory and constructive type theory.*

2005 Department of Mathematics, University of Manchester (UK), invited by P. Aczel, June, 7, 2005.

Title: *Effective topology via formal spaces.*

2004 Department of Mathematics, University of Uppsala (Sweden), invited by P. Martin-Löf (Stockholm) and E. Palmgren (Uppsala), February, 13, 2004. Two seminars:

Title 1: *Small hom-sets in the category of formal spaces and the Stone-Čech compactification,*

Title 2: *Metric and uniform formal spaces.*

1998 Department of Mathematics, University of Munich (Germany), invited by P. Schuster and H. Schwichtenberg, December 14, 1998.

Title: *A predicative framework for analysis via formal topology.*

Talks

2011 XIX Congresso dell'Unione Matematica Italiana, Bologna, September 16, 2011.

Title: *Risultati di indipendenza in teoria costruttiva degli insiemi e dei tipi.*

2010 “Workshop on constructive topology”, Palermo, September 6-7, 2010.

Title: *Inductive Definitions, Imaginary Locales, Generalized Geometric Propositional Theories.*

2002 “TYPES 2002 Workshop”, Nijmegen (Holland), April 24-28, 2002.

Title: *The effective Stone-Čech compactification: Embedding spaces into data-types.*

<http://www.fnds.cs.ru.nl/TYPES2002/>

2002 “Second Workshop on Formal Topology”, Auditorium Santa Margherita, Venice (Italy), April 4-6, 2002.

Title: *The effective Stone-Čech compactification.*

http://www.math.unipd.it/~logic/events_2wftop.html

2000 “XX incontro dell' Associazione Italiana di Logica e sue Applicazioni”, Ravello (Salerno), September 25-28, 2000.

Title: *How a constructive version of Urysohn metrization theorem can turn a collection into a set.*

<http://www.unicam.it/matinf/aila/Incontri/XX/prog.html>

2000 “Logic Colloquium 2000”, Paris, Université de la Sorbonne, July 23-31, 2000.

Title: *How a constructive version of Urysohn metrization theorem can turn a collection into a set.*

<http://lc2000.logique.jussieu.fr/progra.html>

- 1999 Symposium “Reuniting the Antipodes: Constructive and Non-standard Views of the Continuum”, Venice International University (Venice, Italy), May 17-23, 1999.
 Title: *Points in compact regular formal topologies*.
<http://www.mathematik.uni-muenchen.de/~antipode/program.html>
- 1998 “Workshop on Domains IV” Rolandseck (Bonn), Germany, October 2-4, 1998.
 Title: *Formal topologies with weight and distance: a predicative framework for analysis*.
- 1997 “First Workshop on Formal Topology”, October 2-4, 1997, University of Padova.
 Title: *Dia-metrization of formal topologies*.
http://www.math.unipd.it/~logic/events_1wftop_program.html

5 Main academic visits and participation in seminars with only invited scholars

- 2013 Invited participant at the Dagstuhl meeting “Duality in Computer Science”, Germany (Schloss Dagstuhl, Wadern, 28/7-02/08, 2013). I could not participate due to health reasons.
- 2007 Invited participant at the Dagstuhl meeting “Logic, Computability and Topology in Computer Science: A New Perspective for Old Disciplines”, Germany (Schloss Dagstuhl, Wadern, April 19-21, 2007).
<http://www.dagstuhl.de/07163>
- 2005 Six-month visit at the School of Computer Science of the University of Birmingham (UK).
- 2004 One-week visit at the departments of mathematics of Stockholm and of Uppsala (Sweden), invited by the Stockholm- Uppsala logic group.
- 2002 Invited participant at the Dagstuhl meeting “Mathematical Structures for Computable Topology and Geometry”, Germany (Schloss Dagstuhl, Wadern, 26.05.-31.05.2002).
<http://www.dagstuhl.de/en/program/calendar/semhp/?semid=-2002221>
- 2000 Invited participant at the Dagstuhl meeting “Topology in Computer Science: Constructivity; Asymmetry and Partiality; Digitalization”, Germany (Schloss Dagstuhl, Wadern, 4.6. - 9.6.2000).
<http://www.dagstuhl.de/en/program/calendar/semhp/?semid=-2000231>

6 Refereeing activity for journal publications

I acted *repeatedly* as referee for the following journals and publishing companies (inter alia): *Journal of Pure and Applied Algebra*, *Annals of Pure and Applied Logic*, *Mathematical Structures in Computer Science*, *Topology Proceedings*, *Theoretical Computer Science*, Oxford University Press (refereed conference proceedings).

I have often acted as referee for publications in conference proceedings and anthologies.

I am reviewer for *Mathematical Reviews* and *Zentralblatt*.

In 2008 I acted as referee for the Italian Association of Logic and its Applications in connection with the award for the best degree thesis (tesi di laurea) in mathematical logic.

7 Publications

1. G. Curi, “On Tarski’s fixed point theorem”.
Proc. Amer. Math. Soc., 143 (2015), pp. 4439-4455.
2. G. Curi, M. Rathjen, “Formal Baire space in constructive set theory”.
In: *Logic, Construction, Computation*. Papers in honor of Helmut Schwichtenberg’s 70th birthday. P. 123-135, Ontos Verlag, Frankfurt, 2012.
3. G. Curi, “Topological inductive definitions”. Finalists’ papers of the **Kurt Gödel Centenary Research Prize Fellowship 2010**. *Annals of Pure and Applied Logic*, 163 (2012), pp. 1471-1483.
4. G. Curi, “On the existence of Stone-Čech compactification”. *Journal of Symbolic Logic*, 75, 4 (2010), pp. 1137-1146.
5. G. Curi, “On some peculiar aspects of the constructive theory of point-free spaces”. *Mathematical Logic Quarterly*, 56, No. 4 (2010) pp. 375-387.
6. P. Aczel, G. Curi, “On the T_1 axiom and other separation properties in constructive point-free and point-set topology”. *Annals of Pure and Applied Logic*, 161 (2010), pp. 560-569.
7. G. Curi, “Remarks on the Stone-Čech and Alexandroff compactification of locales”. *Journal of Pure and Applied Algebra*, 212, 5, 2008, pp. 1134-1144.
8. G. Curi, “Exact approximations to Stone-Čech compactification”. *Annals of Pure and Applied Logic*, 146, 2-3, 2007, pp. 103-123.
First of APAL ‘Top 25 hottest articles’ April-June 2007
(see http://top25.sciencedirect.com/?journal_id=01680072).
9. G. Curi, “On the collection of points of a formal space”. *Annals of Pure and Applied Logic*, 137, 1-3, 2006, pp. 126-146.
10. G. Curi, “Constructive metrisability in point-free topology”. *Theoretical Computer Science*, 305, 2003, pp. 85-109.
11. G. Curi, “The points of (locally) compact regular formal topologies”. In *Reuniting the Antipodes—Constructive and Nonstandard Views of the Continuum*. Synthèse Library, Vol. 306 (2001), pp. 39-54. Kluwer Academic Publishers, Dordrecht etc. Eds. U. Berger, et al. (refereed conference proceedings).

12. G. Curi, “Metric spaces in type theory via formal topology” (Extended Abstract). In: Proceedings of the Workshop on Domains IV, Rolandseck, Germany, 2-4 October 1998 *Electronic Notes in Theoretical Computer Science*, n.35, 2000.

8 Ph.D. Thesis

Title: *Geometry of observations. Some contributions to (constructive) point-free topology.*

Thesis jury members: Prof. F. Montagna (University of Siena, president), prof. S. Martini (University of Bologna), prof. S. Valentini (University of Padova).

External referees: Prof. P. Aczel (University of Manchester), prof. M. B. Smyth (Imperial college, London).

Jury’s report (italian): “Le ricerche della tesi sono molto originali. Le metodologie utilizzate appaiono del tutto innovative. I risultati sono di grande interesse ed analizzati con profondo senso critico. Nel colloquio il candidato dimostra piena e sicura conoscenza delle problematiche trattate. La commissione giudica il lavoro svolto eccellente”.

Date of examination: February 2, 2004.

Italian Association of Logic and its Applications Award for the best Ph.D. thesis in mathematical logic in the period 2003-2005 (<http://www.ailalogica.it/premi/dottorato.php>).

Award jury members: A. Berarducci (University of Pisa), A. Marcja (University of Firenze), G. Rosolini (University of Genova).

9 Teaching activity

I cooperated with Professor R. Ferro for the mathematical logic course, at the Department of Computer Science, University of Verona (academic years 2007/2008, 2008/2009). I acted as co-supervisor of R. Luongo’s Tesi di Laurea in mathematical logic (University of Padova, 2004).

10 Workshops or conferences (co-)organization

2009 “Quale logica per la didattica”, Department of Computer Science, University of Verona, October 23 - 25, 2009.

2002 “II Workshop on Formal Topology”, Venice (Italy), April 4-6, 2002.

1997 “I Workshop on Formal Topology”, October 2-4, 1997, University of Padova.

Since 1996, I participated in, and co-authored, several founded research projects.

11 Education

Ph.D. student in mathematical logic and theoretical computer science, Department of Mathematics, University of Siena (1999-2004). Student in Mathematics, University of Padova (1993-98). Student of the *Maîtrise de Physique*, Université de Paris 11 (Erasmus, 1992-93). Student in Physics, University of Padova (1989-93).

Foreign languages: English, French.

12 References

References by outstanding scholars will be provided upon request.

13 Contact details

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