

# CURRICULUM VITAE

## DAVIDE CRIPPA

**Date of birth:** 11/01/1981

**Address:** Czech Academy of Sciences, Institute of Philosophy  
Jilská 1, 110 00 Prague, Czech Republic.

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**ORCID ID:** <https://orcid.org/0000-0001-8498-5756>

### ● EDUCATION

01/09/2008 – 14/10/2014 PhD

Thesis title: “Impossibility results: from geometry to analysis”, completed with honours.  
Université Paris Diderot, Paris, FRANCE.

02/09/2006 – 21/09/2007 Master 2

Master in Logic, Philosophy History and Sociology of Sciences (LOPHISS), grade: 17/20.  
Université Paris Diderot, Paris, FRANCE.

01/09/2005 – 01/09/2006 Master 1

Master in Logic, Philosophy History and Sociology of Sciences (LOPHISS), grade: 17/20.  
Université Paris 1, Paris, FRANCE.

01/09/2005 – 31/08/2008 *Elève Ecole Normale Supérieure* (Post graduate Master's Degree)

International student in Philosophy at the *Ecole Normale Supérieure* (ENS). Upon completion, I obtained a Master degree in Contemporary Philosophy. Paris, FRANCE.

01/09/2000 – 23/11/2005 “laurea vecchio ordinamento” (4 years, approximately equivalent to Honours BA)

Degree in philosophy, grade: 110/110 with honours. State University of Milan, Milan, ITALY. Mathematics: 1 year validated (Bachelor level).

### ● CURRENT POSITION

01/04/2019 current position

Postdoct, project leader of the GACR – junior Grant “mathematics in the Czech lands, from the Jesuit teaching to Bernard Bolzano” (until 2021). I am the team leader of a junior project supervising two postdoctoral researchers, dr. Jan Makovsky and dr. Elias Fuentes Guillen.

### ● PREVIOUS POSITIONS

01/04/2018 – 31/03/2019 Position held

Postdoctoral researcher. SPHERE (CNRS, UMR 7219), Université Paris Diderot, Paris, FRANCE.

01/01/2016 – 31/03/2018 (with an interruption between 01/04 and 30/06/2016) Position held.  
Postdoctoral researcher. The Czech Academy of Sciences, Institute of Philosophy, Prague,  
CZECH REPUBLIC.

01/04/2016 – 30/06/2016 Position held  
Postdoctoral researcher. Leibniz Bibliothek Hannover, Hannover, GERMANY.

15/01/2015 – 31/12/2015 Position held  
Postdoctoral researcher (non stipendiary). SPHère (CNRS, UMR 7219), Université Paris  
Diderot, Paris, FRANCE.

15/10/2014 – 14/01/2015 Position held.  
Postdoctoral researcher. Max Planck Institut für Wissenschaftsgeschichte (MPIWG),  
Berlin, GERMANY.

## ● FELLOWSHIPS AND AWARDS

19/01/2020 – 08/02/2020 – Research stay under the RiP (Research in Pairs) with Prof. Andrey  
Bovykin on “impossibility results in Mathematics”. Mathematisches Forschungsinstitut  
Oberwolfach (MFO), Oberwolfach, GERMANY.

01/04/2019 – GACR - Junior Grant number 9-03125Y , *Mathematics in the Czech lands, from the  
Jesuit teaching to Bernard Bolzano*. Czech Academy of Science, Prague, CZECH REPUBLIC.

01/04/2018 – 31/03/2020 - Postdoctoral fellowship at SPHère (U. Paris Diderot), in the project  
*MATHESES – Leibniz's Unpublished Geometrical Manuscripts, Edition and Commentary*  
(ANR-17-CE27-0018).

2019 Seal of Excellence for the Marie Curie IF project: MINIMUM, MINIMUM-The principles of  
calculus in Italy (c. 1700 - c. 1750): continuity, and infinite and infinitesimal quantities  
between the practice and the foundations of mathematics.

01/01/2016 – 31/03/2018 (with an interruption between 01/04 and 30/06/2016) Postdoctoral  
fellowship from the Czech Academy of Sciences. Project *n. L300091602. Bolzano and the  
foundations of analysis: a sociological exploration*. Prague, CZECH REPUBLIC.

01/04/2016 – 30/06/2016 DAAD (German Academic Exchange Service) short research grant.  
Leibniz Bibliothek Hannover, Hannover, GERMANY.

01/03/2017 – 01/03/2018 Grattan Guinness Award, offered by the “*International Commission  
for the History of Mathematics*”. Research project on the archival study of manuscripts related  
to the tradition of differential calculus in Italy between 18<sup>th</sup> and 20<sup>th</sup> century.

15/10/2014 – 14/01/2015 Postdoctoral Scholarship to work in Vincenzo de Risi’s research  
group investigating the history of geometry in relation with the history of the concept of  
space. MPIWG, Berlin, GERMANY.

24/06/2013 – 23/08/2013 Predoctoral scholarship to work in Vincenzo de Risi’s research group.  
MPIWG, Berlin, GERMANY.

01/09/2008 – 31/08/2011      PhD scholarship. Université Paris Diderot. Paris, FRANCE.

### ● SUPERVISING AND MENTORING ACTIVITIES

Member and co-writer of the funded project proposal: “*Impossibility results in geometry: historical and systematical perspectives*”, *Fundo para la investigación científica y tecnológica*, Argentina. Project participants: Eduardo Giovannini, Manuel Dahlquist, Federico R. Quintana, Valeria Valino. This project will fund the organization of meetings in Argentina (2019-2023).

Member and co-writer of the Project proposal “What is a rigorous proof?”, led by Marco Panza (CNRS, Univ. Paris 1) and Abel Lassalle Casanave (UFBA), submitted to the CAPES – COFECUB agency to foster a research network between several French and Brazilian universities. If accepted, this project will fund missions of researchers and PhD students from France to Brazil and from Brazil to France (2019-2023).

Member and co-writer of the funded project proposal “*Proofs, demonstrations, representations*” (Action CAPES – COFECUB Sh 813-14, 2014–2018), led by Marco Panza (CNRS, Univ. Paris 1) and Oswaldo Chateaubriand Filho (PUC – RIO) to foster a research network between Brazilian universities and the University of Paris 1 and fund missions of researchers and PhD students from France to Brazil and from Brazil to France.

01/09/2010 – 01/09/2011      Supervision of Lisa Rivalin, Master Student in Logic, Philosophy History and Sociology of Sciences. Université Paris Diderot, Paris, FRANCE.

### ● TEACHING ACTIVITIES

2019- first semester      Seminar on sociology of science for Master students from Charles University (36h total). Prague, CZECH REPUBLIC.

2017-first semester      Seminar on sociology of science for Master students from Charles University (36h total). Prague, CZECH REPUBLIC.

2016-first semester      Seminar on sociology of science for Master students from Charles University (36h total). Prague, CZECH REPUBLIC.

15/07/2014 – 08/08/2014      Seminar on history of mathematics for graduate students at the Federal University of Bahia (UFBA). Salvador de Bahia, BRAZIL.

01/10/2010 – 01/12/2010      History of Science (recitations), at the Master in Logic, Philosophy, History and Sociology of Sciences. Université Paris Diderot, Paris, FRANCE.

### ● PUBLICATIONS

#### Books

Crippa, D. *The impossibility of squaring the circle in the 17th century. A debate between J. Gregory, Huygens, and Leibniz*. Birkhäuser Basel, 2019. ISBN 978-3-030-01638-8. The books was reviewed by prof. E. Knobloch (*Zentralblatt für Mathematik*, review number: zbl 1411.01003).

Crippa, D., Bella S., Brancato M., Probst S., Trunk A. *Mathesis: unveröffentliche mathematische Schrifte von G. W. Leibniz*, Leibniz-Archiv, Hannover:  
<https://www.gwlb.de/Leibniz/Leibnizarchiv/Veroeffentlichungen/Mathesis.pdf>.

## Chapters in books

Crippa, D. 2019 “One string attached: geometrical exactness in Leibniz’s Parisian manuscripts”, In *Leibniz and the Structure of Sciences Modern Perspectives on the History of Logic, Mathematics, Epistemology* (V. de Risi, editor), Boston Studies in the Philosophy and History of Science, DOI: 10.1007/978-3-030-25572-5\_6

Crippa, D. 2019 “Beating untrodden paths: James Gregory and his Italian readers”, *British Journal for the History of Mathematics*, 2019, **Doi:** 10.1080/26375451.2019.1701860.

Crippa, D. 2018. “On Leibniz’s theorem about the impossibility of squaring the circle and its relation with James Gregory’s Vera Circuli Quadratura”, in *Quaderns d’historia de l’enginyeria*, ed. M<sup>a</sup> Rosa Massa-Esteve, Antoni Roca Rosell, 2018, pp. 209-232.

Crippa, D. 2017. “The impossibility of solving the universal quadrature of the circle in Leibniz’s De Quadratura Arithmetica”. In Pisano R., Fichant M., Bussotti P., Oliveira A.R.E. (eds). *The Dialogue between Sciences, Philosophy and Engineering. New Historical and Epistemological Insights. Homage to Gottfried W. Leibniz 1646 – 1716*. College Publications, London (This article was nominated to be evaluated as one of the best research results of the *Institute of Philosophy of the Czech Academy of Sciences* for 2017 in the category books and chapters).

## Articles in proceedings

Crippa, D. 2018. Exactness in Leibniz’s mathematics: Instruments to construct transcendent al curves, in *Mathematisches Forschungsinstitut Oberwolfach Report No.58/2017* DOI: 10.4171/OWR/2017/Mathematical Instruments between Material Artifacts and Ideal Machines: Their Scientific and Social Role before 1950. Organised by Samuel Gessner (Lisboa), Ulf Hashagen (München), Jeanne Pfeiffer (Paris), Dominique Tournès (Sainte-Clotilde).

## Article in international peer-reviewed journals

Crippa, D. *Beating untrodden paths: James Gregory and his Italian readers. British Journal for the History of Mathematics*, 2019 (forthcoming) <https://doi.org/10.1080/26375451.2019.1701860>

Milici P.; Crippa, D. A Relationship between the Tractrix and Logarithmic Curves with Mechanical Applications. *The Mathematical Intelligencer*, 41, 4 (2019), 29-34. ISSN 0343-6993

Crippa, D. 2017. Descartes on the Unification of Arithmetic, Algebra and Geometry Via the Theory of Proportions, *Revista Portuguesa de Filosofia* 73, no. 3 – 4 (2017): 1239-58, DOI: 10.17990/RPF/2017.

## Book reviews (selection)

Crippa, D. 2019. Michel SERFATI, Leibniz and the invention of mathematical transcendence (Stuttgart : Franz Steiner Verlag, 2018), 17 × 24 cm, XIX-225 p., illustr., bibliogr., coll. « Studia Leibnitiana – Sonderhefte », *Revue d’Histoire des Sciences*, tome 72-1, 2019, pp. 216-218.

Crippa, D. 2018. Amir Alexander. *Infinitesimal: How a Dangerous Mathematical Theory Shaped the Modern World*. 352pp., New York : Farrar, Straus & Giroux, 2014, *ISIS*, Volume 109, Number 1, March 2018.

Crippa, D. 2018. Blåsjö, Viktor. Transcendental curves in the Leibnizian calculus *Studies in the History of Mathematical Enquiry*. Amsterdam : Elsevier/Academic Press (ISBN978-0-12-813237-1/pbk; 978-0-12-813298-2/ebook). vii, 274pp. (2017). *Zentralblatt für Mathematik*.

Crippa. D. 2017. *Mathematische Schriften, Reihe 7, sechster Band, 1673–1676*, Arithmetische Kreisquadratur, Gottfried Wilhelm Leibniz. Akademie-Verlag, Berlin (2012), Siegmund Probst and Uwe Mayer (Eds.), *Historia Mathematica*, Volume 44, Issue 1, February 2017, Pages 73-76.

## Other productions

Interview on the book “the impossibility of squaring the circle”:

<https://newbooksnetwork.com/davide-crippa-the-impossibility-of-squaring-the-circle-in-the-17th-century-birkhauser-2019/>

## ● ORGANISATION OF SCIENTIFIC MEETINGS

24/09/2019 “Mathematical Sciences in the Czech lands”, co-organized with Jan Makovsky. Prague, Czech Academy of Sciences, Institute of Philosophy.

13/05/2019 “Enseignement et histoire des mathématiques” co-organized with C. Vergnerie (SPHère), U. Paris 7, Paris FRANCE.

27/11/2017 – 29/11/2017 Co-organizer of the workshop “Bolzano in Prague”, coorganized with Prof. Steve Russ (U. Warwick). Approx. 10 participants. The Czech Academy of Sciences, Prague, CZECH REPUBLIC.

26/10/2017 Organizer of the workshop on “the relationship between geometry and arithmetic: the theories of proportion from Euclid to Hilbert”, 4th international meeting of the “*Association of Philosophy of Mathematical Practice*” (APMP). Approx. 50 participants. UFBA, Salvador de Bahia, BRAZIL.

29/05/2017 Organizer of a workshop on mathematical instruments and theory (invited speakers: D. Tournès, P. Milici). Université Paris Diderot, approx. 10 participants. Paris, FRANCE.

23/06/2015 Co-organizer with Marco Panza (PARIS 1 – CNRS) and Vincenzo de Risi (MPIWG) of the workshop “Mathematics and Metaphysics in Early Modern Britain: Isaac Barrow”. Approx. 15 participants. MPIWG, Berlin, GERMANY.

26/05/2015 Co-organizer with Marco Panza (PARIS 1 – CNRS) and Vincenzo de Risi (MPIWG) of the workshop “Mathematics and Metaphysics in Early Modern Britain: John Wallis”. Approx. 10 participants. Univ. Paris Diderot, Paris, FRANCE.

24/03/2013 – 27/03/2013 Co-organizer with Fábio Bertato (UNICAMP, Brazil), Italia d’Ottaviano (UNICAMP, Brazil) of the congress “X National Seminar in History of Mathematics”. Approx. 100 participants. State University of Campinas (UNICAMP), BRAZIL.

14/05/2012 – Co-organizer with Marie-José Durand Richard (U. Paris 7)/ Workshop on mathematical Instrument and theory II /12 participants/ Université Paris 7/Paris, FRANCE.

5/12/2011 – Co-organizer with Marie-José Durand Richard (U. Paris 7)/ Workshop on mathematical Instrument and theory I/12 participants/ Université Paris 7/Paris, FRANCE.

21/11/2011-25/11/2011- Co-organizer with dr. Fabio Bertato (Unicamp), dr. Itala D'Ottaviano (Unicamp), dr. Hugo Mariano (USP)/International Conference on Evariste Galois/20 participants/State University of Campinas/BRAZIL.

4/04/2011 – Co-organizer with Karine Chemla (Univ. Paris 7)/Workshop on Geometrical worlds and instruments/12 participants/Université Paris 7/Paris, FRANCE.

01/02/2011- Co-organizer with dr. Sean Walsh (Irvine University)/Workshop on Impossibility proofs in mathematics/ Université Paris 7/12 participants/Université Paris 7/Paris, FRANCE.

22/11/2010 - Co-organizer with David Rabouin (U. Paris 7)/Impossibility problems in the history of mathematics/20 participants/Université Paris 7/Paris, FRANCE.

### ● INSTITUTIONAL RESPONSIBILITIES

27/09/2019 – Member of the International Research Network "AITIA", directed by dr. Benedetta Zaccarello (CNRS) on the history of archives and manuscripts.

11/09/2017 Member of the Examination Board of Dr. Elias Fuentes Guillén's PhD Thesis: "The Germanic Development of the Pre-Modern Notion of Number". University of Salamanca, SPAIN.

28/10/2016 Member of the Jury for the defense of Mr. Renato Francisco Merli's Master thesis: "The Cartesian Distinction between Geometrical and Mechanical Curves". Federal University of Toledo, Toledo (PR), BRAZIL.

Permanent Reviewer for the online database *Zentralblatt für Mathematik*. I also serve as a referee for *Review of symbolic logic*, *Synthese*, *Philosophia Scientiae*, *Journal for General Philosophy of Science*, *Revista portuguesa da filosofia*, *Historia Mathematica*.

### ● MAIN PRESENTATIONS TO PEER-REVIEWED, INTERNATIONALLY ESTABLISHED EVENTS

25-27/06/2020 (forthcoming) Invited speaker to "Scientific discourse between collaboration and dispute: mathematical networks in the Leibnizian era", International Workshop, Gottfried Wilhelm Leibniz Library/ Niedersächsische Landesbibliothek, Hannover, GERMANY.

18/01-22/01/2020 (forthcoming) " 'Give me a lever': Bolzano and the practice of applied mathematics in Prague at the beginning of the 19th century". Accepted contribution (together with Elías Fuentes Guillén | UNAM / Czech Academy of Sciences | Mexico, Jan Makovský | Czech Academy of Sciences | Czech Republic) to the APMP fifth international meeting. ETH, Zurich, SWITZERLAND.

04-06/12/2019 (forthcoming) "A case study in cultural history of mathematics: Bernard Bolzano's examination to become a mathematics professor (1804)." Accepted contribution

to the international conference: “New Paradigms in the history of knowledge”, Università Ca’ Foscari, Venice, ITALY.

09//08/2019 Joint talk with Elías Fuentes Guillén (UNAM, Mexico), Jan Makovsky (AVCR, Prague): “Bernard Bolzano’s 1804 examination: mathematics and mathematical teaching in early 19th century Bohemia”, Workshop on *Bolzano’s mathematics and the general methodology of the sciences*, CLMPS, Prague, CZECH REPUBLIC.

23/11/2018-24/11/2018 “James Gregory and his italian readers.” Workshop on *Mathematical and Astronomical Practices in pre-Enlightenment Scotland and her European Networks*, organized by I. Falconer, St. Andrews (UK), UK.

12/07/2018 “Descartes on the unification of arithmetic and geometry via the theory of proportions.” Talk given at the 12<sup>th</sup> International Congress of the International Society for the History of Philosophy of Science (*HOPOS*), 09/07/2018 – 12/07/2018. Groningen, NETHERLANDS.

20/12/2017 “Geometrical exactness in Leibniz’s Parisian manuscripts”, talk given at the conference “Mathematical Instruments between Material Artifacts and Ideal Machines: Their Scientific and Social Role before 1950”. Organized by Samuel Gessner (Lisboa), Ulf Hashagen (München), Jeanne Pfeiffer (Paris), Dominique Tournes (Sainte-Clotilde), 19/12/2017 – 23/12/2017. Oberwolfach, GERMANY.

26/10/2017 “Descartes on the theory of proportions”, talk given at 4th *APMP* International Meeting, 22/10/2017 – 26/10/2017. Federal University of Bahia, Salvador de Bahia, BRAZIL.

01/02/2017 “The controversy between Gregory and Huygens on the quadrature of the circle”, talk given at the cycle of seminars “The History of Exact Sciences” (organized by P. Beeley and B. Wardhaugh). Oxford University – All Souls College, Oxford, UK.

01/11/2015 “From irreducible to reducible impossibility statements: a shift in mathematical practice”, talk given at the 3rd *APMP* International Meeting, 01/11/2015 – 05/11/2015. Univ. Paris 1, Paris, FRANCE.

07/07/2015 “Revisiting the Distinction between Geometrical and Mechanical Curves: Leibniz and the geometrical nature of trochoids”, Invited talk, Berlin, Max Planck Institut für Wissenschaftsgeschichte.

30/06/2015 Commentary to Jeremy Heis’ talk : “Could the Ancients prove that any five points determine a conic ?”, Paris, Univ. Paris 7, Case Studies in Mathematical Practice (Karine Chemla, Kenneth Manders, Douglas Marshall).

09/10/2014 “Reflexive knowledge in mathematics: the case of impossibility results”, talk at the Sixth French Philosophy of Mathematics Workshop, 08/10/2014 – 10/10/2014. Univ. Toulouse, Toulouse, FRANCE.

17/07/2013 "The controversy between Huygens and Gregory over the squaring of the circle", invited talk. Berlin, Max Planck Institut für Wissenschaftsgeschichte.

26/07/2011 “Simplicity in Descartes’ mathematical practice”, talk at the International Congress of the Division of Logic, Methodology, and Philosophy of Science (CLMPS), 19/07/2011 – 27/07/2011. Univ. of Nancy, Nancy, FRANCE.

## ● MAJOR COLLABORATIONS

- Dr. Andrey Bovykin (UFBA; Brazil), on mathematical impossibility.
- Dr. Elias Fuentes G. (UNAM, Mexico), on Bolzano's mathematical works.
- Dr. Eduardo N. Giovannini (Conicet, Univ. of Santa Fe, ARGENTINA), on Descartes, Hilbert and the foundations of geometry.
- Prof. Abel Lassalle Casanave (UFBA, Salvador de Bahia), Prof. Marco Panza (Univ. Paris 1, CNRS), Prof. Alberto Naibo (Univ. Paris 1) for the project CAPES – COFECUB “*Proofs, demonstrations, representations*”.
- Dr. Pietro Milici (University of Brest, FRANCE) on the historical, didactical and mathematical aspects of the history of 18<sup>th</sup> Century geometry.
- Dr. David Rabouin (CNRS, Univ. Paris Diderot), Dr. Vincenzo de Risi (CNRS, Univ. Paris Diderot).
- Prof. Steve Russ (Univ. of Warwick, UK), on Bolzano's mathematical works.

## ● MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Member of the “*Association for the Philosophy of Mathematical Practice (APMP)*”.

## ● FUNDING RECEIVED

02/07/2018 – 08/07/2018 Funding from CNRS – FRANCE to attend the summer school “Foundations of Geometry from a Historical Perspective”, co-organized by V. de Risi and J. Jost. 250 EUR.

26/05/2015 – 31/05/2015 Funding from the *GDR Histoire de mathématiques* (French agency for the History of Mathematics) for a mission to study Huygens' manuscripts at Leiden University, NETHERLANDS. 250 EUR.

01/07/2014 – 01/09/2014 Travel grant of two months for a research stay at the Federal University of Bahia, offered by the joint project CAPES–COFECUB “*Proofs, demonstrations, representations*” (2014 – 2018). UFBA, Salvador de Bahia, BRAZIL. 1200 EUR.

## ● LANGUAGE SKILLS

Italian, English (fluent), French (fluent), Portuguese (fluent), Latin (read and written proficiency, 5 years high-school+1 year university course with written and oral exams + reading and translation of Latin mathematical texts from the 17<sup>th</sup> Century), German (A2), Spanish (basic), Czech (A1/2).

## ● REFEREES

Prof. Jan Balon, AVCR, Institute of Philosophy ([balon@flu.cas.cz](mailto:balon@flu.cas.cz)).

Dr. David Rabouin, CNRS, université Paris 7 ([davidrabouin2@gmail.com](mailto:davidrabouin2@gmail.com)).



Dr. Vincenzo de Risi, CNRS, université Paris 7 ([vincenzoderisi@gmail.com](mailto:vincenzoderisi@gmail.com)).

Prof. Jesper Lützen, University of Copenhagen ([lutzen@math.ku.dk](mailto:lutzen@math.ku.dk)).

Prof Steve Russ, University of Warwick ([s.b.russ@warwick.ac.uk](mailto:s.b.russ@warwick.ac.uk)).