

Marco Panza

**CURRICULUM VITÆ
WITH LIST OF PUBLICATIONS**

Marco Panza, born in Varese (Italy), July, 10 1958

First Class Researches Director at the CNRS
in History and Philosophy of Sciences,
Institut d'Histoire et de Philosophie des Sciences et des Techniques,
UMR 8590 of the CNRS and the Univ. of Paris 1 and ENS Paris

Current Institutional Address:

UNIVERSITÉ PARIS 1 PANTHEON-SORBONNE
13 rue du Four, 2ème étage
75006 PARIS
e.mail : Marco.Panza@univ-paris1.fr

Current Personal Addresses:

— 15, Bd. De Clichy,
F-75009 Paris
— Via di Corticella 7,
I-40128 Bologna

e. mail: panzam@libero.it

Chronological list of publications

[1] “Necessidade, eternidade, continuidade na Física de Aristoteles”, *Análise*, **2**(1985), pp. 63-94.

[2] (With A. Guerraggio) “Le *Réflexions* di Carnot e le *Contre-Réflexions* di Wronski sul calcolo infinitesimale”, *Epistemologia*, **8**(1985), pp. 3-32.

[3] “Il manoscritto del 1789 di Arbogast sui principi del calcolo differenziale e integrale”, *Rivista di storia della scienza*, **2**(1985), pp. 123-57.

- [4] “Osservazioni a proposito della relazione di J. Petitot”, in F. Minazzi and L. Zanzi (eds.), *La scienza tra filosofia e storia in Italia nel Novecento*, Ist. Pol. dello Stato, Roma 1987, pp. 513-19.
- [5] “Ettore Bortolotti, storico della matematica”, in A. Guerraggio (ed.), *La matematica italiana tra le due guerre mondiali*, Pitagora, Bologna 1987, pp. 279-305.
- [6] “Il metodo geometrico delle flussioni : Jean Montucla, Jacques II Bernoulli, Tommaso Valperga di Caluso”, in S. Rossi (ed.), *Science and Imagination in XVIII-th century British Culture*, Unicopli, Milano 1987, pp. 297-307.
- [7] “La ricerca di Gurdulù. Nota sulla storiografia della matematica”, *Rivista di storia della storiografia moderna*, **8**(1987), n. 2-3, pp. 39-61.
- [8] “Pour une critique de la philosophie mathématique : le cas de Imre Lakatos”, *Le cahier du collège international de philosophie*, **5**(1988), pp. 186-89.
- [9] “Le débat sur les fondements du calcul différentiel en France dans la seconde moitié du XVIII^{ème} siècle : l'hypothèse réductionniste et la naissance de l'algèbre opératoire” [Project of PhD Thesis], *Historia Mathematica*, **15**(1988), pp. 172-3.
- [10] “Il programma biologico di René Thom. Conversazioni con Brian G. Goodwin, René Thom, Jean Petitot”, *Biologica*, **1**(1988), pp. 169-94.
- [11] “L'interpretazione del calcolo delle funzioni analitiche di Lagrange come un calcolo dei differenziali da parte del matematico italiano Vincenzo Brunacci”, *Atti del convegno “Storia degli studi sui fondamenti della matematica e connessi sviluppi interdisciplinari”*, Pisa-Tirrenia, 26-31 Marzo 1984, Tip. Ed. R. Luciani, Roma s.d. [1988], pp. 171-84.
- [12] “A proposito di rivoluzioni scientifiche” [Review of *Science: The renaissance of a History* (Proceedings of the Int. Conf. A. Koyré, Paris, Coll. de France, 10-14 June 1986), spec. issue of *History and Technology*, **4**(1987), ns. 1-4 (pp. 1-582)], *Rivista di storia della storiografia moderna*, **9**(1988), ns. 2-3, pp. 109-28.
- [13] *La Statua di Fidia. Analisi filosofica di una teoria matematica : il calcolo delle flussioni*, Unicopli, Milano 1989, pp. 1-360.
- [14] “Controverses locales et controverses globales en mathématiques. Un cas historique : la notion de convergence au XVIII^e siècle”, in F. Gil (éd.), *Scientific and Philosophical controversies*, Ed. Fragmentos, Lisboa 1990, pp. 279-98.

[15] “Un'interpretazione di Laplace del ‘teorema’ di Taylor e dell'analogia di Leibniz. Alle origini del calcolo formale degli operatori”, *Rivista di storia della scienza*, **4**(1987), pp. 157-79.

[16] Review of: J. Gasser, *Essai sur la nature et les critères de la preuve*, *History and Philosophy of Logic*, **10**(1991), pp. 128-31.

[17] “The Analytical Foundation of Mechanics of Discrete Systems in Lagrange's *Théorie des fonctions analytiques*, Compared with Lagrange's Earlier Treatments of This Topics”, *Historia Scientiarum* **44**(1991), pp. 87-132 et **45**(1992), pp. 181-212.

[18] “Eliminare il tempo : Newton, Lagrange e il problema inverso del moto resistente”, in M. Galuzzi (ed.), *Giornate di storia della matematica*, Editel, Commenda di Rende (Cosenza) 1991, pp. 437-87.

[19] Participation to: J. Petitot, *La philosophie transcendantale et le problème de l'objectivité*, Ed. Osiris, Paris 1991 (pp. 40-1).

[20] *La forma della quantità. Analisi algebrica e analisi superiore : il problema dell'unità della matematica nel secolo dell'illuminismo*. PHD THESIS, *Cahiers d'Histoire et de Philosophie des Sciences.*, vols. 38 et 39 (1992), pp. I-XXII + 1-870.

[21] (With J.-C. Pont, eds.) *Espace et horizons de réalité*, Masson, Paris 1992, pp. I-X + 1-194.

[22] “Gonseth et les prolégomènes d'une logique de la connaissance”, in [21], pp. 23-45.

[23] “De la continuité comme concept au continu comme objet mathématique”, in J.-M. Salanskis et H. Sinaceur (eds.) *Le Labyrinthe du continu*, Springer-France, Paris 1992, pp. 16-30.

[24] “Dalla metafisica del moto alla scienza matematica della natura. Considerazioni critiche a proposito di alcuni problemi cinematici trecenteschi”, in L. Bianchi (ed.), *Filosofia e teologia nel trecento. Studi in ricordo di Eugenio Randi*, edited by the Fédération Internationale des Instituts d'Etudes Médiévales, Louvain la Neuve, 1994, pp. 413-478.

[25] (With J.-C. Pont; eds.) *Les savants et l'épistémologie vers la fin du XIXème siècle*, Blanchard, Paris, 1995.

[26] “L'intuition et l'évidence. La philosophie kantienne et les géométries non euclidiennes : relecture d'une discussion”, *in* [25], pp. 39-87.

[27] (With J. M. Salanskis; eds.) *L'objectivité mathématique. Platonismes et structures formelles*, Masson, Paris, 1995.

[28] “Platonisme et intentionnalité”, *in* [27], pp. 85-132.

[29] (With J.-M. Salanskis) “La question du platonisme. Observations d'ensemble en guise de conclusions”, *in* [27], pp. 213-223.

[30] “De la Nature épargnante aux forces généreuses. Le principe de moindre action entre mathématique et métaphysique : Maupertuis et Euler (1740-1751)”, *Revue d'Histoire des sciences*, **48**(1995), pp. 435-520.

[31] “Che cosa è la storiografia della matematica. Riflessioni di ispirazione crociana in risposta all'intervento di Massimo Galuzzi”, *Rivista di storia della storiografia moderna*, **16**(1995), 1-3, 153-161.

[32] (With S. Roero; eds.) *Geometria, flussioni e differenziali. Osservazioni sul rapporto fra tradizione e innovazione nella matematica del seicento*, La Città del Sole, Napoli, 1995.

[33] “Da Wallis a Newton: una via verso il *calcolo*. Quadrature, serie e rappresentazioni infinite delle quantità e delle forme trascendenti”, *in* [32], pp. 131-219.

[34] “Gonseth et les mathématiques” *in* E. Barbin et M. Cavaing (eds.), *Les philosophes et les mathématiques*, Ellipses, Paris, 1996, pp. 264-283.

[35] “The Concept of Function, between Quantity and Form in the 18th-century”, *in* H. N. Jahnke, N. Knoche, M. Otte (eds.) *History of Mathematics and Education: Ideas and Experiences*, Vandenhoeck & Ruprecht, Gottingen, 1996, pp. 241-274.

[36] Review of: Enrico Giusti, “Galilei e le leggi del moto”, *in* G. Galilei, *Discorsi e dimostrazioni matematiche intorno a due nuove scienze attinenti alla meccanica e ai movimenti locali*, a cura di E. Giusti, Einaudi, Torino, 1990, pp. IX-LX and Enrico Giusti, *Euclides reformatus. La teoria delle proporzioni nella scuola galileiana*, Bollati Boringhieri, Torino, 1993, pp. XII + 348, *Sciences et Techniques en Perspectives*, ser. 2, **1**(1997), pp. 181-202.

- [37] (With M. Otte; eds.) *Analysis and synthesis in Mathematics*, Kluwer, Boston Studies in the Philosophy of Science, Dordrecht, Boston, London, 1997.
- [38] (With M. Otte) “Introduction” in [37] pp. IX-XIII.
- [39] “Mathematics Acts of Reasoning as Synthetic *a priori*”, in [37], pp. 261-326.
- [40] “Classical sources for the concepts of analysis and synthesis”, in [37], pp. 365-414.
- [41] (With M. Otte), “Mathematics as an activity and the analytic-synthetic distinction”, in [37], pp. 261-271.
- [42] Review of: Jean-Michel Salanskis, *Le temps du sens*, Editions HYX, Orléans, 1977, *Sciences et Techniques en Perspectives*, 2nd ser., 2(1998), pp. 415-434.
- [43] “Quelques distinctions à l'usage de l'historiographie des mathématiques”, in F. Rastier, J.-M. Salanskis, R. Scheps (eds.), *Herméneutique : textes, Sciences*, P. U. F., 1998, pp. 357-388.
- [44] “Le falsificationnesme de Popper et le malentendu de l'induction”, *Sciences et Techniques en perspective*, 2nd ser., 2(1998).
- [45] Review of: Rueben Hersh, *What Is Mathematics, Really?*, Oxford Univ. Press, Oxford, *Sciences et Techniques en Perspectives*, 2nd ser., 2(1998).
- [46] “Maupertuis, Pierre-Louis Moreau de”, in M. Blay, R. Halleux (eds.), *La science classique, XVIIe-XVIIIe siècle: dictionnaire critique*, Flammarion. Paris, 1998, pp. 341-355.
- [47] “Peirce et le continu”, *Revue de Synthèses*, 119, 4th ser., 1998, pp. 603-611.
- [48] “Die Entstehung der analytischen Mechanik im 18tem Jahrhundert”, in H. N. Jahnke (ed.), *Geschichte der Analysis*, Spektrum akademie Verlag, Heidelberg, Berlin, 1999, pp. 171-190.
- [49] *Nombres. Eléments de mathématiques pour philosophes*, Diderot, Paris, 1999, pp. 1-443.

- [50] *Introducción*, in Isaac Newton, *Tratado de Métodos de Series y Fluxiones*, Servicios Editoriales de Facultad de Ciencias, UNAM, Coll. Mathema, México D. F., 2001, pp. 1-56.
- [51] “Y a-t-il une tradition épistémologique française ?” in L. Fedi et J.-M. Salanskis, (ed.), *Les philosophies françaises et la science : dialogue avec Kant*, ENS Editions, *Cahiers d'Histoire et de Philosophie des Sciences*, **50**, 2001, pp. 33-61.
- [52] “La révolution scientifique, les révolutions, et l'histoire des sciences. Comment Ernest Coumet nous a libérés de l'héritage d'Alexandre Koyré”, *Revue de Synthèse*, **122**, 4th ser., 2001, pp. 411-423.
- [53] “I metodi matematici nelle scienze umane”, *Lettera Pristem*, **42**, Dicembre 2001, pp. 31-42.
- [54] “Mathematisation of the Science of Motion and the Birth of Analytical Mechanics : A Historiographical Note”, in P. Cerrai, P. Freguglia, C. Pellegrini (eds.), *The Application of Mathematics to the Sciences of Nature. Critical moments and Aspects*, Kluwer A. P., Plenum P., New York, 2002, pp. 253-271.
- [55] “Continuidad Local Aristotélica y Geometría Euclideana”, in C. Alvarez y A. Barahona (eds.), *La Continuidad en las Ciencias*, Fondo de Cultura Económica, México D.F., 2002, pp. 37-120.
- [56] (With Albert Presas) “La divulgación de la ciencia en el siglo XIX: la obra de Flammarion”, *Quark, Ciencia, Medicina, Comunicación y Cultura*, **26**, 2002.
- [57] (With Carlos Alvarez ; eds.) *Logic and Mathematical Reasoning*, special issue of *Synthese*, **134**, 1-2, 2003.
- [58] “Mathematical proofs”, in [56], pp. 119-158.
- [59] (With Giovanni Ferraro) “Developing into series and returning from series: A note on the foundations of eighteenth-century analysis”, *Historia Mathematica*, **30**, 2003, pp. 17-46.
- [60] “The Origins of Analytical Mechanics in 18th century”, English Translation of [48], in H. N. Jahnke (ed.) *A History of Analysis*, American Mathematical Society and London Mathematical Society, s.l., 2003, pp. 137-153. [A Czech translation also appeared : « Vznik analytické mechaniky v 18. Stol. », in : H.N. Jahnke, éd., *Historie Analýzy*. Math Publishing, Pardubice, Czech Republic, 2007, pp. 98-107].

- [61] Review of M. Blay, *La science du mouvement. De Galilé à Lagrange*, Belin, Paris, 2002, *Annals of Science*, **60**, 2003.
- [62] *Isaac Newton*, Les Belles Lettres, Paris, 2003.
- [63] “À l’origine des théories mathématiques”, *Science et technique en perspective*, 2nd ser., **7**(2003), 197-204.
- [64] “À l’origine de la notion de nombre transcendant : John Wallis et la quadrature du cercle”, *Science et technique en perspective*, 2nd ser., **8**(2004), 333-367.
- [65] “Une première méthode de quadrature établie par Newton ou l’étude des modalités de variation d’une grandeur”, in Carlos Álvarez, Rafael Martínez, Patricia Radelet de Grave, Jan Lacki (eds.), *Variar para encontrar. Variar pour mieux trouver. The lore of variation: finding pathways to scientific knowledge*, UNAM (Col. Mathema), México, Genève, Louvain, 2004, pp.143-175.
- [66] (with F. Doridot) « À propos de l’apport des sciences cognitives à la philosophie des mathématiques », *Intellectica*, **39**(2004), 2, 263-287 and 299-301.
- [67] *Newton et les origines de l’analyse, 1664-1666*, Blanchard, Paris, 2005.
- [68] “Some Sober Conceptions of Mathematical Truth”, in M. H. G. Hoffmann, J. Lenhrd, F. Seeger (eds.), *Activity and Sign. Grounding Mathematics Education*, Springer, New York, 2005, pp. 335-347.
- [69] Revision of Italian translation of Descartes’ correspondence on mathematical matters with addition of some critical notes: René Descartes, *Tutte le lettere, 1619-1950*, edited by Giulia Belgioioso, Bompiani, Milano, 2005 ; critical notes : *ibid.*, pp. 103-105, 254, 482-491, 556-557, 663-669.
- [70] “Une tentative par Newton de prouver la règle du parallélogramme : 14 et 16 mai 1666”, in P. Radelet-de Grave, *Symétrie*, Brepols, 2005, pp. 365-383.
- [71] “On the use of analysis in Omar Khayyam’a algebra”, *Farhang*, **18** (2005), 53-54, pp. 99-124.
- [72] (With Antoni Malet , eds.) Special issue of *Historia Mathematica*, **33**, 1, 2006 (with introduction), “The origins of Algebra : From al-Khwarizmi to Descartes. International Workshop held at Bercelona, 27-29 March 2003”, *ibid.*, pp. 1-3.

[73] “François Viète, between analysis and cryptanalysis”, *Studies in History and Philosophy of Sciences*, **37** (2006), pp. 269-289.

[74] “Il platonismo aritmetico”, in A. Coliva (ed.), *Filosofia analitica*, Carocci, Roma, 2007, pp. 121-156.

[75] *Nombres. Eléments de mathématiques pour philosophes*, ENS édition, Lyon, 2007.

[76] « Euler’s *Introductio in analysin infinitorum* and the program of algebraic analysis: quantities, functions and numerical partitions », in R. Backer (éd.) *Euler Reconsidered. Tercentenary essays*, Kendrick Press, Heber City (Utah), 2007, pp. 119-166.

[77] « What is new and what is old in Viète’s *analysis restituta* and *algebra nova*, and where do they come from? Some reflections on the relations between algebra and analysis before Viète », *Revue d’Histoire des mathématiques*, **13**, 2007, pp. 85–153.

[78] « Isaac Barrow and the Bounds of Geometry », in P. Radelet De-Grave, *Liber Amicorum Jean Dhombres*, Brepols, Turnhout (Be), 2008, pp. 365-411.

[79] « The role of algebraic inferences in Naïm ibn Mûsa’s *Collection of geometrical propositions* », *Arabic Sciences and Philosophy*, **18**, 2008, 165-191.

[80] “Joseph Louis Lagrange”, *The Princeton Companion to Mathematics*, Edited by Timothy Gowers, June Barrow-Green and Imre Leader, associate editors, Princeton Univ. Press, Princeton, 2008, pp. 751a-752b.

[81] Review of M. Maierù, *John Wallis. Una vita per un progetto*, Rubettino Editore, Soveria Mannelli, 2007, *Historia Mathematica*, **36**, 2009, pp. 279-281.

[82] “La Storia della matematica di Ludovico Geymonat: una valutazione critica”, in F. Minazzi (ed. by), *Ludovico Geymonat un maestro nel novecento. Il filosofo, il partigiano e il docente*, ed. Unicopli, Milano, 2009, pp. 241-255.

[83] (with Andrea Sereni) *Il problema di Platone. Un’introduzione storica alla filosofia della matematica*, Carocci, Roma, 2010, 360 pp.

[84] “What More There Is in Early-Modern Algebra than its Literal Formalism”, in A. Heeffer and M. Van Dyck (eds.), *Philosophical Aspects of*

Symbolic Reasoning in Early-Modern Mathematics, College Publications, London, 2010, pp. 193-230.

[85] “Das velocidades às fluxões”, *Scientiæ Studia*, **8**, 4, 2010, pp. 509-546 (Portuguese translation of [88]).

[86] (with Domenico Napoletani et Daniele Struppa) «Agnostic Science. Towards a Philosophy of Data Analysis», *Foundations of Science*, **16**, 1, 2011, pp. 1-20.

[87] “Rethinking Geometrical Exactness”, *Historia Mathematica*, **38**, 1, 2011, pp. 42-95. Also in *Humanistica*, **7**, 1-2, 2012, pp. 249-281.

[88] “Breathing fresh air into the philosophy of mathematics” (Review of P. Mancosu (ed.), *The Philosophy of Mathematical Practice*, Oxford Univ. Press, Oxford, New York, etc., 2008), *Metascience*, 20 (n.3), 2011, pp. 495-500.

[89] (with Giovanni Ferraro) “Lagrange's Theory of Analytical Functions and his Ideal of Purity of Method”, *Archive for History of Exact Sciences*, **66**, 2012, pp. 95-197.

[90] «From Velocities to Fluxions», in A. Janiak and E. Schliesser (éd.), *Interpreting Newton: Critical Essays*, Cambridge Univ. Press, Cambridge, etc., 2012, pp. 219-254.

[91] (With J. Mumma and G. Sandu, eds), *Diagrammatic Reasoning in Mathematics*, spécial issue of *Synthese*, 186, n° 1, 2012 (Introduction, by J. Mumma and M. Panza : pp. 1-5).

[92] «The Twofold Role of Diagrams in Euclid's Plane Geometry», in [90], pp. 55-102.

[93] (with A. Lassalle Casanave) «Sobre el Significado del Postulado 2 de los *Elementos*», *Notae Philosophicae Scientiae Formalis*, **1**, n. 2 (October 2012), pp. 103 - 115. [Online publication : <http://gcfcf.com.br/pt/revistas/filosofia-da-pratica-matematica/>]

[94] (with Andrea Sereni) *Plato's Problem. Introduction to Mathematical Platonism*, Palgrave MacMillan, Basingstoke (UK), 2013, 306 pp. (English translation of [82])

[95] (with Andrea Sereni) *Introduction à la Philosophie des Mathématiques*, Flammarion, Paris 2013 (French translation of [82]).

[96] (with Domenico Napolitani et Daniele Struppa) « Process Rather than Descriptions ? », *Foundations of Science*, **18**, 1, 2013, pp. 587-590 [Response to a comment of P. Humphreys to [86a]].

[97] (with Domenico Napolitani et Daniele Struppa) « Artificial Diamonds are Still Diamonds », *Foundations of Science*, **18**, 1, 2013, pp. 591-595 [Response to a comment of J. Lenhard to [86]].

[98] (with Sébastien Maronne) « Euler et la mécanique newtonienne: d'une mécanique géométrique à la mécanique analytique », in M. Malpangotto, V. Jullien, E. Nicolaidis (éd. by) *L'homme au risque de l'infini. Mélanges d'histoire et de philosophie des sciences offerts à Michel Blay*, Brepols, Turnhout (BE) pp. 201-211.

[99] (with Sébastien Maronne) « Euler, Reader of Newton: Mechanics and Algebraic Analysis », *Advances in Historical Studies*, 3, 2014, pp. 12-21.

[100] (with Domenico Napolitani and Daniele Struppa) « Is Big Data Enough? A Reflection on the Changing Role of Mathematics in Applications », *Notices of the American Mathematical Society*, 61 (5), 2014, pp. 485-490.

FORTHCOMING

[101] « From Lagrange to Frege: Functions and Expressions » à paraître in a livre collectif édité par A. Arana and C. Alvarez, Palgrave MacMillan, London, 2011.

Studies and Academic Career

1977	High-School diploma <i>Liceo Scientifico</i> of Varese, Italy.
1983	Degree in Philosophy [philosophy of science] University of Milan, Italy.
1985	Italian Government Grant for post-graduate studies abroad, held at the <i>Ecole des Hautes Etudes en Sciences Sociales</i> of Paris (Centre A. Koyré).
1986	Master in history of science at the same school.

- Italian Government Grant for a PhD.
- 1987 Lectures at *Collège International de Philosophie* of Paris.
- 1988-1993 Assistant professor in history and philosophy of science at the University of Geneva.
- 1990 PhD at the University of Genova, Italy.
- 1993-1996 Associate professor of second class in history and philosophy of science at the University of Nantes.
- 1993/1994 Visiting professor at the University of Geneva.
- 1994/1995 Visiting professor at the University of Geneva.
Visiting professor at the University of Trieste.
- 1996 Visiting professor at the National Autonomous University of Mexico.
Associate professor of first class in history and philosophy of science at the University of Nantes.
- 1997 Invited scholar (for 3 months) at the University of Bielefeld (Germany).
Visiting professor at the National Autonomous Univ. of Mexico (UNAM), at the Univ. of Guadalajara, and at the Univ. *del Valle*, Cali, Colombia.
- 1998/1999 Invited lectures at the *Ecole des Hautes Etudes en Science Sociales*, in Paris
- 1999 Visiting professor at the National Autonomous Univ. of Mexico (UNAM), at the Univ. of Guadalajara, and at the Univ. *del Valle*, Cali, Colombia.
- 2000 Sabbatical year for research from the University of Nantes.
Obtainment of the French *Habilitation à diriger des recherches* at the EHESS of Paris.
- 2001 Obtainment of the qualification as Full Professor for sections 17 (Philosophy) and 72 (History of Sciences) of French CNU.
- 2001-2003 Research Professor at ICREA, Barcelona.
- 2002-2005 Researcher at the CNRS: REHSEIS, UMR 7596, CNRS and Univ. of Paris 7.
- 2004 Invited Research Professor at ICREA, Barcelona (for 2 months).
- 2005 Invited Professor at the Master of Scientific Journalism at the *Università dell'Insubria*, Varese (Italy).

2005-2009	Research Director at the CNRS: Equipe REHSEIS, UMR 7596, CNRS and Univ. of Paris 7.
2006-2007	Teaching in the Master program LOPHIS (Paris 1, Paris 4, Paris 7, ENS)
2005-2007	Lectures at the Master of History and Philosophy of Sciences (LOPHISS), Univ. of Paris 1, Paris 4, Paris 7, ENS.
2009-2011	Research Director at the CNRS: IHPST, UMR 8590, CNRS, Univ. of Paris 1 and ENS, Paris.
2010-2011	Lectures at the Master of History and Philosophy of Sciences (LOPHISC) Univ. of Paris 1, Paris 4, Paris 7, ENS: course of Philosophy of Mathematics
2010-2011	Invited Professor at the University of Geneva, dept. of philosophy (second semester).
2010-2013	Allocation of the National Price of Scientific Excellence.
2011...	First Class Research Director at the CNRS: IHPST, UMR 8590, CNRS, Univ. of Paris 1 and ENS, Paris.

International Conferences

(where invited as a speaker).

1984	Tirrenia : <i>Storia dei fondamenti della matematica.</i>
1985	Gargnano : <i>Sciences and imagination in the British culture</i> [member of the organising committee]. Varese : <i>La rinascita della storia e della filosofia della scienza in Italia dopo la morte di Peano.</i>
1986	Evora : <i>Controverses scientifiques et philosophiques.</i> Gargnano : <i>La matematica italiana fra le due guerre mondiali</i> [member of the organising committee].
1987	Cambridge : <i>Newton (1687), Lagrange (1787), Poincaré (1888).</i> Marseille : <i>Ars Analitica.</i> Paris : <i>La portata europea della filosofia della scienza italiana del Novecento.</i>
1988	Cetraro (Italie) : <i>Giornate di storia della matematica</i>
1989	Oberwolfach (R. F. T) : <i>Geschichte der Mathematik.</i> Annaba (Algérie) : <i>Sciences et révolution française.</i> Amburgo : <i>Congrès international d'Histoire des Sciences</i> (Symposium on: <i>Mathematics and French Revolution</i>).

- 1990 **Cerisy-la-Salle (France)** : *Le continu mathématique*.
Genève : *La philosophie ouverte de F. Gonseth à l'épreuve de la Géométrie* [member of the scientific committee].
- 1991 **Napoli** : *Dalla geometria al calcolo (1637-1704)*.
- 1992 **Oran** : *Les Méthodes infinitésimales, Histoire et Perspective*.
Essen : *Interaction between the History of mathematics and Mathematical Learning*.
- 1993 **Genève** : *Les savants et l'épistémologie vers la fin du XIX^e siècle* [member of the scientific committee].
Paris : *Le platonisme mathématique*, juin 1993 [member of the scientific committee].
Zaragoza : Symposium on: *Analysis and Synthesis in Mathematics* [member of scientific committee], August 1993.
- 1994 **Cérisy-la-Salle** : *Herméneutique : textes et contextes*.
Mexico : *Changings in History of Mathematics*.
Nantes : *Les enfants du siècle. Science et savants de l'époque romantique*.
Bologna : *La storia della matematica all'università di Bologna*.
- 1995 **Mexico** : *Le concept de continuité et les Mathématiques*.
Colima : (Mex.) *Congres of the Mexican Mathematical Society*.
Essen : *Geschichte der Analysis*.
- 1996 **Nantes** : *Sources et refus de la pensée scientifique cartésienne* [member of the scientific committee].
Mexico : *Descartes Filosofo y científico* [member of the scientific committee].
Orleans : *Mathématiques Cartésiennes : Spécificités Epistémologiques ; Implications Didactiques*.
Fontenaix-aux-Roses : *Descartes et les lois de conservation*.
- 1997 **Paris** : *Une approche non kantienne de la science : un enjeu pour la philosophie française*, Jun 1977.
Zinal : (CH): *Histoire et philosophie de l'axiomatique*, September 1997 [member of the scientific committee].
Mexique : *Logique et raisonnement mathématique*, September 1997 [member of the scientific committee].
- 1998 **Nantes** : Jean Bouguer. *La science à l'épreuve de l'expérience*, Jun 1998.

- 1999 **Mexico** : *Aspects in the history of geometry*, mars 1998
Arcidosso [Italy] : Applications of mathematics, Jun 1999.
Peyresq [France] : *La pensée numérique*, September 1999.
Paris : *Histoire des jeux, jeux de l'histoire*, november 1999.
- 2000 **Milan** : *Incontri e scontri. Un secolo di relazioni fra matematica e filosofia*, March 2000.
Paris : *L'Algèbre de Fibonacci à Viète*, December 2000.
- 2001 **Mexico** : *The Notion of Measure* July, 2001.
- 2002 **Han sur Lesse (Belgique)**, *The notion of Symmetry in Mathematics*, September 2002.
Cali (Colombia) *primera Escuela latino-americana de historia y filosofía de la matemática*, November 2002.
Bogotá, *Logica y razonamiento*, November 2002.
Paris (Univ. de Paris X, Nanterre), *Qu'est-ce que la philosophie des sciences ? Science et philosophie autour de 1900*, November 2002.
- 2003 **Barcelone** (ICREA et Univ. Pompeu Fabra), *The Origins of Algebra from al-Kwarizmi to Descartes* [member of the scientific committee], Mars 2003.
Pittsburg, Workshop in philosophy of mathematics, Juin 2003.
Seville, *International meeting in history and philosophy of mathematics*, Septembre 2003.
Mexico, *Las razones del álgebra*, november, 2003
- 2004 **Los Angeles**, *Communication and dissimulation in 17th century*, February 2004.
Paris, *Where Mathematical objectivity comes from*, [member of the scientific committee], March, 2004
Genève, *Louis Rougier (1889-1982). Vie et œuvre d'un philosophe engagé*, October 2004.
Locarno, *Kant: filosofia e critica della ragione*, October 2004.
Luminy (Marseille), *Histoire de l'algèbre*, October 2004.
Oberwolfach (Allemagne), *History of Differential Equations*, November 2004.
Cali (Colombia) *Secunda Escuela latino-americana de historia y filosofía de la matemática*, November 2004.

- Bogotá**, *Congreso Nacional Colombiano de Enseñanza de la Física*, November 2004.
- Nantes**, *Colin Maclaurin et son temps*, December 2004.
- Paris**, *Journées «Jean-Louis Gardies (1925-2004)»*, December 2004.
- 2005 **Nancy**, *Kant et le calcul infinitesimal*, February 2005.
- Oxford**, *The Varieties of analysis* (Congress of the British Society for History of Philosophy), March 2005.
- Paris**, *Interpréter la géométrie de Descartes*, [Member of organiser committee], April 2005.
- Lille**, *Proof in Mathematics* [Member of the scientific committee], May 2005.
- Pittsburgh**, Workshop on the tradition of geometrical analysis, Jun 2005.
- Pisa** (Centro de Giorgi), *Ars Analytica: the Beginnings of a New Geometry*, September 2005.
- Mexico**, *El análisis matemático en los siglo XVII y XVIII*, October 2005.
- Roma**, *Les correspondences savantes de Descartes et de ses contemporains*, December 2005.
- 2006 **Clermon-Ferrand**, *Algèbre et Géométrie de la Renaissance à l'Âge classique*, April 2006.
- Paris**, Congress of HOPOS (History and Philosophy of Sciences), Jun, 2006.
- Budapest**, Congress de l'Association des Sociétés philosophiques de langue française, August, 2006.
- Gargano sul Garda** (Italia), *Continuo e discreto. Dall'esperienza percettiva alle costruzioni di razionalità*, October 2006.
- Cali** (Colombia), *La construction des nombres reels (1)*, November 2006
- Bogotá** (Colombia), *A propos de l'enseignement de la mécanique*, November 2006
- 2007 **Strasbourg**, *Kant et les mathématiques*, January 2007.
- Oxford**, *Geometrical Objects: Architecture and the Mathematical Sciences, 1400-1800* [Member of the scientific committee], March, 2007.
- Clermont-Ferrand**, *Traditions Euclidiennes*, April 2007.
- Barcelone**, *Méthodes des indivisibles*, Mai, 2007.

- Paris**, *Philosophy of mathematics as an interpretative enterprise: how much history of mathematics should the philosophy of mathematics be able to account for?* [Organiser], Jun 2007
- Leiden**, *Newton as philosopher*, Jun 2007 .
- Beijing**, *13th Congress of the Division of Logic, Methodology and Philosophy of Sciences of the International Union of History and Philosophy of Sciences*, August, 2007.
- Mexico**, *Analytical philosophy and foundation of mathematics*, September 2007.
- Stanford**, *Diagrams in Mathematics* [Member of the scientific committee], October 2007.
- 2008 **Paris**, *The evolution of the notion of function in 18th and 19th century?* [Organisateur], April 2008.
- Bochum**, *Newton's Heritage*, May 2008.
- Paris**, *Mathematical Understanding*, Jun 2008.
- Sevilla**, *The Philosophy of Mathematical Practices*, Jun 2008.
- San Sebastian**, *8th International Congress of Ontology: The infinite*, September 2008.
- Gargnano sul Garda**, *La scienza antica*, October 2008.
- Mexico**, *What is Analysis*, October 2008.
- Popayan** (Colombia), *La construction des nombres reels (2)*, November 2008
- 2009 **Paris**, *Quantité et Mesure* [Organisateur], Mars 2009.
- Paris**, *Ontological Shifts in Geometry* [Organisateur], Jun 2009.
- Belèn (Brasil)**, *Éducation en sciences et mathématiques: perspectives interdisciplinaires*, Jun 2009.
- Curitiba (Brasil)**, *Mathematics and Philosophy in Early-Modern age*, Jun 2009.
- Budapest**, *XXIIIth Congress of History of Sciences and Technology*, July-August, 2009.
- Ghent**, *Philosophical Aspects of Symbolic Reasoning in Early-Modern Science and Mathematics*, August 2009.
- Oberwolfach**, *History and Philosophy of mathematical formalism and notations*, October 2009.
- 2010 **Paris**, *Textes et images*, Mai 2010
- York**, *The foundations of mathematics and the origins of analytical philosophy*, September 2010

- Garganao sul Garda**, *Sciences in the antiquity*, October 2010.
- Paris**, *Semantic, Semantics*, October, 2010.
- Bruxelles**, *1st Congres of APMP*, December 2010.
- 2011 **Palermo**, *A realist philosophy of mathematics*, February, 2011.
- Siena**, *Summer school in Philosophy of Logic*, Juin 2011.
- Besse en Chandesse**, *Logicism Today*, Juin 2011.
- Nancy**, *14th Congress of the Division of Logic, Methodology and Philosophy of Sciences of the International Union of History and Philosophy of Sciences*, July, 2011.
- Milano**, *7th Congress of the European Society of Analytical Philosophy [Workshop on Numerical Cognition and mathematical Ontology]* September, 2011
- Salvador (Brasil)**, *15th CONESUL conference in Philosophy of formal sciences (Philosophy of Mathematical Practice)*, Octobre 2012
- Søndebord (Demmark)** *The usefulness of epistemic tools for investigating the history of the practice of mathematics*, Novembre 2011
- 2012 **London**, *Mathematics of abstraction*, March, 2012.
- Bucharest**, *Philosophy of Mathematics Today*, Juin 2012.
- Alghero**, *Congres of the SIFA (Italian Society of Analytic Philosophy) : Plenary Lecture*, September 2012.
- Pisa**, *Filosofia della Matematica: dalla logica alla pratica*, Settembre 2012.
- Mexico**, *La Cara Oculta de los Axiomas Matemáticos*, October 2012.
- Brescia**, *12th Congres of the SISM (Italian Society of History of Mathematics)*, November 2012.
- Paris**, *Indispensability and Explanation*, Novembre 2012 [organiser, with D. Bonnay and F. Pataut]
- 2013 **Campinas (Brazil)**, *Mathematical Certainty and Exactness*, March, 2013.
- Campinas (Brazil)** *10th National Brazilian seminar of History of Mathematics*, March, 2013.
- Paris** *Lagrange (1736-1813) : bilan historiographique et recherches récente* Mai, 2013.
- Urbana-Champaign (USA)** *APMP 2nd Congres*, October 2013.

- 2014 **Paris**, *Atelier Lickasiewicz*, Janvier 2014.
 Dubrownink, *10th IUC Philosophy of Science Conference*,
 April 2014.
 Milano, *Frege and Real Numbers*, Mai 2014.
 Berlin, *Geometry and Mechanics*, June 2014

Services to the profession

- 1995-2002 Editor of *Sciences et Techniques en Perspective* (an
 international review of history of sciences).
1997-2000 Member of the *Conseil d'administration* of the *Société
Française d'Histoire des sciences et des Techniques*.
1999-2003 Member of section 72 (Logic, History and
 philosophy of science) of French CNU (National
 University Committee).
2003-2009 (With K. Chemla et D. Tournes) *Organiser of the
seminar of history and philosophy of mathematics* of the
 REHSEIS
2002 Scientific director of the section of *History of
mathematics* of the Congress of the French Society of
 History of Sciences and Techniques, Poitiers, May
 2004.
2004-2005 Member of the scientific committee of the seminair
 Histoire et philosophie des sciences mathématiques
 (common seminair of CAPHES, C. Koyré,
 REHSEIS, SHSPAM).
2004-2006 Director of the project *L'objectivité mathématique à
l'age classique*, supported by CNRS and French
 Ministry of Education.
2004-2007 Director of a project ECOS-Nord for scientific
 interchanges between France and Mexico.
2008-2011 Member of the project *Ideals of Proof* (*Chair d'excellence*
 of the *Agence Nationale la Reberche*, assigned to
 M. Detlefsen at the universities of Nancy 2 and
 Paris-Diderot).
2009-... (With L. van Atten, J. Dubucs, F. Patout), *Responsible
of the seminar PhilMath* de l'IHPST
2009-... Member of the Steering and Program Committees
 of the Paris-Nancy PhilMath workshop (an

- international workshop to be hold each year, alternatively in Paris et Nancy).
- 2010 (With other 8 colleagues) Foundation of the APMP: Association for the Philosophy of Mathematical Practice (An international philosophical society)
- 2010-... Member of the Conseil du Laboratoire of the IHPST.
- 2010-... Member of the Scientific Committee of the *Institut National de Sciences Humaine et Sociales* of the CNRS and of its Steering Comitee.
- 2011-... Director of the ANR project IMI (*The Interrogative Model of Inquiry Meets Dynamic Logic*).
- 2011-... Member of the Steering Comitee of the Italian Society for the History of Mathematics.

Participation to PhD and HdR committees

- 1993 *Thèse* of Jean-Pierre Friedelmayer, *L'ouvre mathématique de Arbogast*, Univ. of Strasbourg.
- 1998 *Thèse* of Anne Rabu-Boyé, *L'Apollonius Gallus et le problème des trois cercles*, Univ. of Nantes.
- 2002 *Thèse* of D. Rabouin, *Mathesis universalis. L'idée de « mathématique universelle » à l'age classique*, Univ. of Paris IV.
- 2003 *Thèse* of S.Croset, *Philosophie de l'inconscient. Recherches sur un système conceptuel permettant de penser l'inconscient*, Univ.ofe Paris X, Nanterre.
- Thèse* of Fernand Doridot, *Le debat sur la fondation de l'arithmétique de Frege à Gentzen*, Univ.ofe Nantes.
- 2004 *Ph.D* of X. Docampo, *La formación matemática del mercader catalán 1380-1521. Análisis de fuentes manuscritas*, Univ. of Santiago de Compostela.
- Thèse* of E. Barrot, *L'aventure mathématique de la dialectique depuis Hegel. Perspectives sur les visages contemporains du « problème de la dialectique » en épistémologie des mathématiques et de leur histoire*, Univ. of Paris X, Nanterre.
- 2006 *Thèse* of O. Souan *Le platonisme en mathématiques*, Univ. de Paris IV.

- 2007 *Thèse* of A. Romero *La mécanique d'Euler : prolégomènes à la pensée physique des milieux continus*, Univ. of Paris 7. HdR of S. Rommevaux, Univ. de Tour.
Thèse of S. Maronne *La théorie des courbes et des équations dans la Géométrie cartésienne : 1637-1661*, Univ. of Paris 7 [Supervisor].
- 2008 *Thèse* of Igor Ly *Mathématiques et Physique dans l'œuvre philosophique de Poincaré*, Univ. of Nancy 2.
Thèse of Olivia Chevalier *La méthode analytique cartésienne : entre mathématiques et philosophie première*, Univ. of Paris 10.
Thèse of Nicasio Ledesma *La matemática moderna : entre le « formalismo modificado » de Cavailles y el « platonismo estructural » de Lautman*, Univ. of Seville.
- 2009 *Thèse* of Bernartd Cache *Essai de lecture du De Architectura de Vitruve*, Univ. de Grenoble.
Thèse of Catherine KARELLA, *Changement conceptuel et développement scientifique : le cas de la logique mathématique de Hilbert à Gödel*, Univ. de Paris 1.
- 2010 *Thèse* of Paula Quinon, *Le modèle attendu de l'arithmétique: l'argument de Tennenbaum*, Univ. de Paris 1.
Thèse of Aranzazu San Ginés Ruiz, *Anaphore et représentation daigrammatique*, Univ. de Paris 1.
Examiner for the European PhD for the Dissertation Luca Tranchini (Univ. of Tübingen and Siena), *Proof and Truth. An anti-realist perspective*.
Thèse of Constant Say, *Constructions des concepts et principes fondateurs de la physiques classique : cas de la dynamique newtonienne*, Univ. de Paris 7
Thèse of Ghislaine Idabouk, *La finance mathématique, e Black, Scholes et Merton au théorème fondamental d'évaluation (1973-1998). Constitution d'une discipline et questions de méthode*, Univ. de Paris 7 [Supervisor].
- 2011 *Thèse* of Daniele Molinini, *Towards a Pluralist Approach to Mathematical Explanation of Physical Phenomena* Univ. de Paris 7 [Supervisor].
- 2012 *Thèse* of Eduardo Noble, *L'école Combinatoire allemande: un projet de fondation des mathématiques au XVIIIe siècle* Univ. de Paris 7 [Supervisor].
Habilitation à diriger des Recherches, of Joseph Vidal Rosset, Univ. of Lorraine.

- 2013 *Thèse of André Bazzoni Bueno, La compositionnalité « inside around ». Autour de la construction de la signification, Université de Paris 1.*
Thèse of Raphaël Sandoz, Peut-on résoudre un phénomène ? Une Histoire de l' "énigme" de l'applicabilité des mathématiques aux sciences expérimentales, Univ. de Genève.
Thèse of Sara Confalonieri, The telling of the unattainable attempt to avoid the casus irreducibilis for cubic equations: Cardano's De Regula Aliza. With a compared transcription of 1570 and 1663 editions and a partial English translation, Univ. of Paris 7.

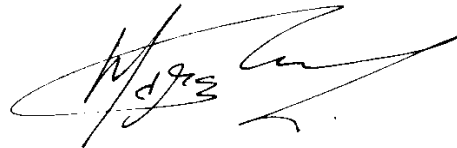
Supervision of PhD theses

- 2001-2007 *Thèse of S. Maronne La théorie des courbes et des équations dans la Géométrie cartésienne : 1637-1661 Univ. of Paris 7.*
- 2005-2010 *G. Idabouk, Mathématiques du hasard et finance: l'entrée du calcul stochastique en théorie financière à partir de 1973, Univ. de Paris 7.*
- 2006-2012 *E. Noble, L'école Combinatoire allemande: un projet de fondation des mathématiques au XVIIIe siècle, Univ. of Paris 7.*
- 2007-2011 *D. Molinini, Mathematical explanation of physical phenomena , Univ. of Paris 7.*
- 2008-2013 *Sara Confalonieri, The telling of the unattainable attempt to avoid the casus irreducibilis for cubic equations: Cardano's De Regula Aliza. With a compared transcription of 1570 and 1663 editions and a partial English translation, Univ. of Paris 7.*
- 2008-... *Davide Crippa, Theorems of impossibility, from geometry to analysis, Univ. of Paris 7.*
- 2009-... *Fernando Galvez, Variétés du structuralism en philosophie des mathématiques, Univ. de Paris 1.*
- 2010-... *Méven Cadet, Frege's Universal Logic, Univ. de Paris 1.*
Ramzi Kebaili, Poincaré et Brouwer entre topologie et Intuitionisme, Univ. of Paris 1 and Paris 7

Marco Panza
CURRICULUM VITAE WITH LIST OF PUBLICATIONS

- 2013-... Pietro Milici, *The Tractional Motion: history, mathematics, didactic*, Univ. of Palermo and Paris 1.
- 2013-... Costanza Brevini, *Procedural Platonism*, Univ. de Milan and Paris 1
- 2013-... Marina Imocrante, *The problem of the application of Mathematics*, Univ. de Milan and Paris 1
- 2024-... David Waszeck, *Representation in Mathematics*, Univ. of Paris 1

Paris, June, 27th 2014



Marco Panza