

Bruno R. Chiarellotto born in Cornuda (TV-Italy) August 16th, 1961

Direttore of Dipartimento di Matematica "Tullio Levi-Civita", Univ. Padova
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Laurea in Matematica 1985.

PhD in Matematica (Z. Mebkhout-M. Cornalba advisors) 1989; Rome.

1987-89: C.N.R. scholarship Universite' de Paris VII

1989-90: Visiting research fellow and research fellow, Princeton University.

1992-3 Visiting Professor at U.C. Berkeley .

1994 Professor, Engineering Faculty Padova.

1995-7 Visiting Professor at Strasbourg and Paris Nord.

1997 Professore Ordinario in Geometry, Padova.

1997/8 Visiting Professor, Università di Paris VI. Univ. de Rennes.

-1998-2009 he has been invited as visiting professor in the universities of Hiroshima, Rennes, Paris Nord, Madrid.

-2001-2009: Director of the Graduate school in Mathematics Padova

-2003 Invited Professor Weizmann Institut Rehovot

- 2009-2015 local coordinator for the international PhD programme Erasmus-mundus-doc "ALGANT-DOC"

-2010 JSPS Fellow, Tohoku Univ. Sendai.

-2014 February, Invited Member of IHES Paris.

- 2013, 2015, 2017 Invited professor, Tokyo Univ. (Komaba).

-2018 November, Organizer (Niziol, Colmez, Chiarellotto) Oberwolfach Sem. "Syntomic Cohomology and p-adic Hodge Theory".

-2019 January, Invited Member IHES, Paris

He has been invited for seminars, or short visits or during conferences at the universities of Paris VI e Institut H. Poincarè, Kyoto, Barcellona, Tokyo, Chiba, Nagoya, Minneapolis, Cambridge e Oxford, Caen, Nice, Groningen, Luminy, Muenster, Weizmann Inst., Tohoku, ENS Lyon, Pisa, Nairobi, Imperial College, Sendai, Hiroshima, Strasbourg. Recently: invited speaker to Belgian-Dutch Algebraic Geometry Seminar (Leuven 2016), Fukuoka International Conference on Arithmetic Geometry (April 2017), CIRM conference "p-adic Analytic Geometry and Differential Equations" (March 2017), "Crystals and Geometry in ch. p" (TU Munchen, April 2018)

Teaching:

-2015: Bressanone lectures on "Field of norms" during "Perfectoid Spaces" Summer School.

-2014 Dobbiaco lectures on " Clemens Schmidt exact sequence" during "Monodromy summer school.

-2011 Bressanone lectures on "Weil Cohomologies and Bloch-Ogus axioms. System of realizations and compatibilities" during "Cohomology theories: a road map".

-2009 Luminy, a series of lectures: "An invitation to p-adic differential equations" during the the summer school " Arithmetic and Galois theory of differential equations".

-he gave a series of lectures on the master SAMI of the Istituto Italiano di Alta Matematica di Milano.

- He has been teaching PhD courses or series of lectures organized as course at the universities of Milano, Padova, Nagoya, Hiroshima e Rennes.

-PhD students: Fornasiero(2004), Pulita(2006) (co-tutele Parigi), Ciccioni(2010), Trentinaglia(2007), Settimi (2010). G.Hernandez-Mada (2015 cotutele Bordeaux-Montreal), P.Gatti (cotutele Univ. Leuven 2019). Ongoing PhD students: Y.Nakada.

Grants:

Local Coordinator for Padova node of national project MIUR-PRIN 2015 "Number theory and arithmetic geometry"

Univ. Padova Project 2015, CPDA159224/15 "Vanishing cycles, irregularity and ramification.

Coordinator of the national project MIUR-PRIN 2010-11 "Arithmetic Algebraic geometry and number theory".

Local coordinator for Padova node of the National Project PRIN-MIUR: 2002,2004,2006,2008. Member of the EC network "Arithmetic Algebraic Geometry" HCM and RTN (1994-2006). He won a grant from the Cariparo Fondation "Cariparo-Eccellenza" for the project "Differential methods in algebra, geometry and number theory" period 2009-2012. In charge for the Padova node 2006-2009 of the JSPS (Japan) project Core-to-Core "New Developments of Arithmetic Geometry, Motive, Galois Theory, and Their Practical Applications".

Organization of conferences:

- "Hodge Theory", Venice San Servolo 19-24 june, 2006.

- "Arithmetic Algebraic Geometry" Cetraro 7-13 october 2007"

- "p-adic differential equations , Bressanone 6-9 september 2008"

- Workshop on formal, algebraic and rigid geometry, Padova 7 may 2010

- "Log-Conference" Bordeaux, june 22-25 2010

- "Berkovich spaces and differential equations" Strasbourg 8-11 november 2010

- "From p-adic differential equations to arithmetic algebraic geometry", Padova 3-5 february 2011

- "Cohomology theories: a road map". Summer School Brixen 12-17 september 2011

- "Higher structure in algebraic analysis" Padova 10-21 february 2014.

- "Monodromy" Summer school Dobbiaco (IT), june 23-28, 2014.

- "Perfectoid Spaces" Summer School Brixen (IT) 1-4 september 2015.

-INdAM special period "p-adic Langlands program" (Padova, may 12-july 12, 2019)

- On the Scientific Committee of the " 27th Journées Arithmétiques", 2011 Vilnius (LT).

He acts as referee for research projects in USA (AMS), France(ANR), Belgium, Holland, Israel.

Others: He has been indicated in a short list by the Italian Foreign Ministry as

scientific "attache" at the Italian Embassy in Beijing.

Bibliography

BRUNO CHIARELLOTTO

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29) Chiarellotto, Bruno; Lazda, Christopher Around ℓ -independence. *Comp.Math* 154 (2018) no.1 223-248

28) Chiarellotto, Bruno; Lazda, Christopher, Combinatorial degenerations of surfaces and Calabi-Yau threefolds. *Algebra and Number Theory* 10(2016), no.10 2235-2266.

27) Chiarellotto Bruno, Coleman Robert, Di Proietto Valentina, Iovita Adrian On a p -adic invariant cycles theorem. *J. Reine Angew. Math* 711(2016), 55–74.

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25) Chiarellotto, Bruno, Tsuzuki Nobuo Clemens-Schmid exact sequence in characteristic p , *Math.Annalen* 358(2014), no.3-4, 971–1004.

24) Chiarellotto Bruno, Ciccioni Alice, Mazzari Nicola Cycles Classes and the systemic regulator. *Algebra and Number Theory* (2013), no.3, 533-566.

23) Chiarellotto, Bruno An invitation to p -adic differential equations, *Seminaires et Congres Soc.Mat.France* 23(2011), 115-168.

22) Chiarellotto, Bruno, Gerotto Giovanni, Sullivan Francis J. Dwork's 1994 Padova Lectures on exponential modules, *Seminaires et Congres Soc.Mat.France* 23(2011), 169-227.

21) Chiarellotto, Bruno; Tsuzuki, Nobuo Log-growth filtration and Frobenius slope filtration of F -isocrystals at the generic and special points. *Doc. Math.* 16 (2011), 33–69.

20) Chiarellotto, Bruno; Pulita, Andrea Arithmetic and differential Swan conductors of rank one representations with finite local monodromy. *Amer. J. Math.* 131 (2009), no. 6, 1743–1794.

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18) Chiarellotto, Bruno; Fornasiero, Marianna Logarithmic de Rham, infinitesimal and Betti cohomologies. *J. Math. Sci. Univ. Tokyo* 13 (2006), no. 2, 205–257.

17) Chiarellotto, Bruno; Tsuzuki, Nobuo Cohomological descent of rigid cohomology

for étale coverings. *Rend. Sem. Mat. Univ. Padova* 109 (2003), 63–215.

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11) Chiarellotto, Bruno; Le Stum, Bernard Sur la pureté de la cohomologie cristalline. (French) [On the purity of crystalline cohomology] *C. R. Acad. Sci. Paris Sér. I Math.* 326 (1998), no. 8, 961–963.

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3) Chiarellotto, Bruno Duality in rigid analysis. In *p -adic analysis (Trento, 1989)*, 142–

172, Lecture Notes in Math., 1454, Springer, Berlin, 1990.

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