

Curriculum Vitæ

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JEAN-BAPTISTE CAMPESATO

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Birth date: 09-17-1989
Place of birth: Mont-Saint-Martin (54, France)
Nationality: French

Employment

- Oct. 2016–...** Postdoctoral researcher supported by the *Japan Society for the Promotion of Science: FY2016 JSPS Postdoctoral Fellowship (Short-term) for North American and European Researchers* for a period of 12 months.
Institution: Saitama University, Japan.
Host researcher: Toshizumi Fukui.
- Oct. 2015–Aug. 2016** Teaching and Research Temporary Assistant [*Attaché Temporaire d'Enseignement et de Recherche*] (half-time) in the mathematics department J.A. Dieudonné of the Nice Sophia Antipolis University (France).
- Oct. 2012–Sep. 2015** Ph.D student with a teaching assistant charge [*Doctorant Contractuel Chargé d'Enseignement*] in the mathematics department J.A. Dieudonné of the Nice Sophia Antipolis University (France).

Education

- Oct. 2012–Dec. 2015** Ph.D student under the supervision of Adam Parusiński.
Ph.D awarded with highest honours [*mention très honorable*] on December 11, 2015.
Nice Sophia Antipolis University, France.
Subject: A motivic zeta function to study real singularities.
Referees: Georges Comte, Goulwen Fichou and Satoshi Koike.
Jury members: Georges Comte, Goulwen Fichou, Krzysztof Kurdyka, François Loeser (President), Michel Merle and Adam Parusiński.
- 2011–2012** M.Sc in mathematics with highest honours.
Nice Sophia Antipolis University, France.
Project under the supervision of Adam Parusiński: De Rham cohomology.
<http://math.unice.fr/~campesat/docs/memoireM2.pdf>
Recalls on manifolds, construction of differential forms, integration of differential forms, de Rham cohomology, elementary proof of the existence of a good cover and relationship with Čech cohomology using the Čech-de Rham complex.
- 2010–2011** First year of M.Sc with highest honours.
Nice Sophia Antipolis University, France.
Project under the supervision of Ingo Waschki: fundamental group and coverings
<http://math.unice.fr/~campesat/docs/memoire.pdf>
Proof of the representation theorem of the fundamental groupoid.
- 2009–2010** B.Sc in mathematics with highest honours.
Nice Sophia Antipolis University, France.

2007–2009	MPSI then MP* at the Lycée Masséna (Nice, France). [Preparation for French competitive examinations.]
2007	Baccalauréat S, mention très bien (Nice, France). [Final secondary school examination in sciences with mathematics option, granted with highest honours]

Preprints & Publications

- [5] J.-B. CAMPESATO, *Complete classification of Brieskorn polynomials up to the arc-analytic equivalence*, 2017, arXiv:1708.04425. Submitted
- [4] J.-B. CAMPESATO, *On the arc-analytic type of some weighted homogeneous polynomials*, 2016, arXiv:1612.08269. Submitted
- [3] J.-B. CAMPESATO, *From the blow-analytic equivalence to the arc-analytic equivalence: a survey*, Saitama Math. J., 31 (2017), pp. 35–78. Proceedings of the Sixth Japanese-Australian Workshop on Real and Complex Singularities
- [2] J.-B. CAMPESATO, *On a motivic invariant of the arc-analytic equivalence*, Ann. Inst. Fourier (Grenoble), 67 (2017), pp. 143–196
- [1] J.-B. CAMPESATO, *An inverse mapping theorem for blow-Nash maps on singular spaces*, Nagoya Math. J., 223 (2016), pp. 162–194

Conferences, meetings & workshops

- 03-13-2017–03-18-2017 *Topics in Real Geometry* in Nagoya University, Japan.
- 01-18-2017–01-20-2017 *Contact structures, singularities, differential equations*, annual research workgroup, Kanazawa University, Japan.
- 12-06-2016–12-09-2016 *Singularity theory of differential maps and its applications*, Research Institute for Mathematical Sciences (RIMS), Kyoto University, Japan.
- 08-08-2016–08-12-2016 *Topology, Stratified Spaces and Particle Physics Summer School* within the “Focus Program on Topology, Stratified Spaces and Particle Physics” at the Fields Institute (Toronto, Canada).
- 04-25-2016–04-29-2016 *Workshop Young Researchers in Singularities* organized by the GDR Singularities and Applications at the mathematics department J.A. Dieudonné of the Nice Sophia Antipolis University (Nice, France).
- 04-20-2016–04-22-2016 *Lectures on Real Algebraic Geometry in the algebraic and analytic context* by Ludovico Pernazza at the Mathematics research institute of Rennes (IRMAR) (Rennes, France).
- 03-07-2016–03-09-2016 *Conference on Singularities and Topology* at the mathematics department J.A. Dieudonné (Nice, France).
- 01-04-2016–01-06-2016 *Meeting on Singularities* involving the mathematic departments of Chambéry, Marseille and Nice at the CIRM (Marseille, France).
- 05-29-2015–05-31-2015 *PhD students symposium* of the mathematics department J.A. Dieudonné in Saint-Étienne-de-Tinée (France).
- 02-09-2015–02-13-2015 *Young researchers in singularities* within the thematic month *Singularités et applications* at the CIRM (Marseille, France).
- 06-13-2014–06-15-2014 *PhD students symposium* of the mathematics department J.A. Dieudonné in Fréjus (France).
- 05-20-2014–05-22-2014 *Lectures on the topology of singular real algebraic varieties* by Adam Parusiński at the mathematics department Paul Painlevé in Lille (France).
- 03-26-2014–03-28-2014 *Workshop on real geometry and singularities* in Rennes (France) part of the Thematic Semester 2014 of the Henri Lebesgue Center of Mathematics.

- 10-13-2013–10-19-2013 Seminar on motivic integration at the Mathematisches Forschungsinstitut Oberwolfach (Oberwolfach, Germany).
- 09-16-2013–09-20-2013 The 1st Franco-Japanese-Vietnamese Symposium on Singularities (and the 7th Franco-Japanese Symposium on Singularities) organized by the GDRI Singularités (Nice, France).
- 06-07-2013–06-09-2013 PhD students symposium of the mathematics department J.A. Dieudonné in Fréjus (France).
- 04-15-2013–04-19-2013 Meeting in the framework of the GDR Singularities and Applications at the CIRM (Marseille, France).
Theme: geometry and topology of complex singularities.
- 10-22-2012–10-26-2012 Annual meeting of the GDR Singularities and Applications held in Porquerolles Islands (France).
Theme: characteristic classes.

Talks

- 01-18-2017 *Motivic integration and real singularities* during the workshop *Contact structures, singularities, differential equations* in Kanazawa University (Japan).
- 01-12-2017 *Motivic integration and real singularities* at the seminar of the mathematics department of Saitama University (Japan).
- 12-08-2016 *On a motivic invariant of the arc-analytic equivalence* during the workshop *Singularity theory of differential maps and its applications* at the RIMS, Kyoto University (Japan).
- 11-21-2016 *On a motivic invariant of the arc-analytic equivalence* at the seminar of the mathematics department of Saitama University (Japan).
- 04-25-2016 *On a motivic invariant of the arc-analytic equivalence* during the workshop *Young Researchers in Singularities* organized by the GDR Singularities and Applications at the mathematics department J.A. Dieudonné (Nice, France).
- 02-02-2016 *Une fonction zêta motivique pour l'équivalence arc-analytique [A motivic zeta function for the arc-analytic equivalence]* at the seminar on singularities at the IMJ-PRG (Paris, France).
- 01-04-2016 *On a motivic invariant of the arc-analytic equivalence* during the meeting on singularities involving the mathematic departments of Chambéry, Marseille and Nice at the CIRM (Marseille, France).
- 11-05-2015 *Une fonction zêta motivique pour l'étude des singularités réelles [A motivic zeta function to study real singularities]* at the seminar *Singularities of the Marseille Mathematics Institute* (France).
- 09-24-2015 *Une formule de convolution pour une fonction zêta motivique réelle [A convolution formula for a real motivic zeta function]* at the seminar of the real algebraic geometry team of the Mathematics research institute of Rennes (IRMAR, France).
- 02-09-2015 *A blow-Nash inverse mapping theorem* at the *Young researchers in singularities* conference within the thematic month *Singularités et applications* at the CIRM (Marseille, France).
- 06-05-2014 *Un théorème d'inversion pour les applications analytiques par arcs [An inverse mapping theorem for arc-analytic maps]* at the seminar *Singularities of the Marseille Mathematics Institute* (France).
- 04-18-2014 *Un théorème d'inversion pour les applications analytiques par arcs [An inverse mapping theorem for arc-analytic maps]* at the seminar of the geometry team of the department of Mathematics of the Savoie University in Chambéry (France).
- 03-27-2014 *An inverse mapping theorem for arc-analytic maps* at the workshop on real geometry and singularities in Rennes (France).

06-08-2013 *Développements de Puiseux et nœud d'une branche* at the PhD students symposium in Fréjus (France).

Teaching experience*

01-2016–06-2016 Tutorials for fourth year students (First year of M.Sc) in pure and applied mathematics - Groups and Geometry.

11-2015–12-2015 Oral practice session for first year students in mathematics - Algebra 1.

09-2015–12-2015 Lectures and tutorials for first year students in biology - Mathematics for biologists.

09-2014–12-2014 Tutorials for second year students in mathematics - Algebra 2 (Second course on linear algebra).

09-2014–12-2014 Oral practice session for second year students in mathematics - Algebra 2.

09-2014–12-2014 Tutorials for first year students in mathematics - Math option.

09-2013–12-2013 Tutorials for second year students in mathematics - Algebra 2 (Second course on linear algebra).

09-2013–12-2013 Tutorials for first year students in mathematics - Math option.

05-2013 Oral practice session for first year students in computer science - Linear algebra.

09-2012–12-2012 Tutorials for first year students in physics and chemistry - Analysis 1.

09-2012–12-2012 Tutorials for first year students in mathematics - Math option.

Vulgarization

January 13, 2016 Supervision of a middle school student at the mathematics department J.A. Dieudonné in Nice.

June 16, 2015 Supervision of a high school student at the mathematics department J.A. Dieudonné in Nice.

March 12&13, 2015 Supervision of two high school students at the mathematics department J.A. Dieudonné in Nice.

June 12&13, 2014 Mathematics training courses in the framework of MathC2+ at the mathematics department J.A. Dieudonné in Nice.

05-07-2014–06-03-2014 Mathematical experimentations for the show *Sciences & Expériences* at the Parc Phoenix in Nice.

March 13&14, 2014 Supervision of two high school students at the mathematics department J.A. Dieudonné in Nice.

June 13&14, 2013 Mathematics training courses in the framework of MathC2+ at the mathematics department J.A. Dieudonné in Nice.

2009–2014 Same mathematical experimentations as below for the Science Festival at the Nice Sophia Antipolis University.

2009–2011 Same mathematical experimentations as below in middle and high schools of Nice.

09-07-2009–10-27-2009 Mathematical experimentations for the show *Sciences & Expériences* of the Institut Robert Hooke de Culture Scientifique (Now called Institut Culture Science Alhazen) for middle school students, high school students and people of all ages at the Parc Phoenix in Nice.

*Including assessing papers and participation in making problem sets, homework subjects and exam subjects.

Involvement in the academic life

05-2015–07-2015	Nominated member of the electoral advisory committee of the Université Côte d'Azur (France).
10-07-2014–08-31-2016	Elected member of the board of the mathematics department J.A. Dieudonné (Nice, France).
09-05-2014	Nominated member of the disciplinary board for the french baccalauréat (Académie de Nice, 2014).
April 2014–September 2015	Elected member of the board of directors of the Nice Sophia Antipolis University (France). Elected member of the disciplinary board, the electoral advisory committee and the management boards of the common documentation department.
09-05-2013	Nominated member of the disciplinary board for the french baccalauréat (Académie de Nice, 2013).
April 2012–April 2014	Elected member of the board of directors of the Nice Sophia Antipolis University (France). Elected member of the financial board, disciplinary board and the electoral advisory committee.
2011	Involved in the elaboration of the 2011-2020 work plan of the <i>CROUS de Nice-Toulon</i> (France).

Languages

- French: native language.
- English: proficient.

Computer science skills

- Operating systems used: Arch Linux, Slackware Linux, Gentoo Linux, NetBSD, Plan 9 from Bell Labs.
- Programming languages: C, Go, Ada, Caml-light, L^AT_EX, X_YL^AT_EX, XHTML, PHP.