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Personal information:

Nationality: French
Date of birth: July 13, 1982
Place of birth: Neuilly-sur-Seine, France
Marital status: married, 2 children.
Languages: French (Native), English (C1), German (B1-2).

CURRICULUM VITÆ

Education

2006-2009: PhD under the direction of L. Schneps: *Mixed Tate Motive and MacPherson-Procesi blow-ups, an application to MZV's double shuffle*.
Graduate student in algebraic geometry (*University Paris Diderot Paris 7*).

2002-2006: Student of the École Normale Supérieure (ENS) de Cachan:

- Masters degree with a score of 16,5 out of 20 (highest honors). (2005, *University Paris Diderot Paris 7*).
- Masters dissertation completed with a score of 17 out of 20 under the direction of L. Schneps and P. Lochak: *Differential Forms on Moduli Spaces of Curves of Genus Zero*.
- Received the "agrégation" in 2005 (a highly competitive national exam to enter the teaching profession at secondary and higher education levels as a civil servant).
- Bachelor's Degree (Maîtrise) with honors in theoretical mathematics (2004, *University Paris Diderot Paris 7*).

Personal projects and other positions:

- Sep 07 - Feb 08: Early Stage researcher position (Marie Curie Action) at Durham University (U.K.).
- Feb 06 - Jun 06: research stay in Northeastern University (Boston, U.S.A.) supervised by M. Levine : *Motivic multiple zeta values*.

Publications

Scientific publications

- "Motifs de Tate mixtes et éclatements à la MacPherson-Procesi ; une application aux valeurs zêta multiples motiviques", Thèse, Université Paris Diderot - Paris 7, Décembre 2009.
- "Motivic double shuffle", *Int. J. Number Theory* **6** (2010), no. 2, p. 339–370.
<http://dx.doi.org/10.1142/S1793042110002995>
<http://arxiv.org/abs/0808.0248>
- "Explicit associator relations for multiple zeta values", *Mathematical J. Okayama Univ.* (2011).
<http://arxiv.org/abs/1007.1076>
- "Cycle complex over \mathbb{P}^1 minus 3 points : toward multiple zeta values cycles", *Journal of Pure and Applied Algebra*, Elsevier, 2016, pp.2590-2647.
<http://arxiv.org/abs/1210.4653>.

- “Multiple zeta value cycles in low weight”, dans Contemporary mathematics, American Mathematical Society, 2015, “Feynman amplitudes, periods and motives”, 648, pp.203-247. .
<http://arxiv.org/abs/1302.2462>.
- “A relative basis for mixed Tate motives over the projective line minus three points”, Communications in Number Theory and Physics, International Press, 2016, **10** (1), pp.87-131.
<https://doi.org/10.4310/CNTP.2016.v10.n1.a4>
- “A motivic Grothendieck-Teichmüller group over \mathbb{Z} ”, Algebr. Geom. Topol. 18, No. 2, 635-685 (2018) <https://doi.org/10.2140/agt.2018.18.635>
- “Équations fonctionnelles du dilogarithme”, Ann. Inst. Fourier 68, No. 1, 151-169 (2018).
<https://doi.org/10.5802/aif.3155>

Other publications

- Author for the H&K editions (Paris): correction of a highly competitive mathematics contest (École Centrale).
- Auteur de chapitres du Manuel “1STI2D Physique-Chimie-Matématiques”, Nathan, 2019
- Auteur de chapitres du Manuel “Terminale STI2D Physique-Chimie-Matématiques”, Nathan, 2020

Professional experience

Teaching experience

- 2017-now** : Académie de Paris (France) : C.P.G.E ATS at Lycée Diderot (Paris) Competitive licence
2016-2017 : TZR 92 - Académie de Versailles (France):
 Highscholl 2nd - 1STMG - 1ES/L
2018-2021 : Mathematics interogations for admission at French Naval School

University positions

- 2013-2016**: Postdoctoral position at Osnabrück University:
Mathematik für Anwender, Licence-semester 1 (WS2015).
Lineare Algebra und analytische Geometrie II, Licence-semester 1 (SS2015).
Lineare Algebra und analytische Geometrie I, Licence-semester 1 (WS2014).
Differentialgeometrie, Licence-semester 4 (SS2014).
Lineare Algebra und analytische Geometrie I, Licence-semester 1 (WS2013).
- 2013**: Postdoctoral position (Jan.-Dec) at Max Planck Institut für Mathematik, Bonn.
- 2010-2012**: Postdoctoral position at the University Duisburg-Essen:
Riemann Surfaces, graduated student course M2.
- 2009-2010**: ATER (lecturer) at the University Paris Diderot, Paris VII:
MT1: mathematics 1st year undergraduate students (09-10)
- 2006-2009**: Ph.D. position at the University Paris Diderot, Paris VII:
MC2: mathematics for chemistry 1st year undergraduate students (07-09),
MK2: personal mathematics studies for 1st year undergraduate students (06-08).

Administrative Experiences

- 2014-2015**: Organizer of Topology seminar, *Bar/cobar construction in operads and the recognition principle question in motivic homotopy theory*, (Osnabrück Universität).
- 2009-2010**: Organizer of a weekly workshop, *Géométrie des classifiants des groupes de tresses (généralisées) et leurs compactifications*, (Institut de Mathématiques de Jussieu).
- 2007-2008**: Coorganizer of the ASG seminar at Durham University.
 Coorganizer of the Feynman graphs, periods and polylogarithms seminar at Durham university.
- 2006-2008**: Project manager of a L^AT_EX training intended for graduate students.

Research stay-Research fellowship-Research groups

- 2014:** November - *Research in team* - ICMAT - madrid : “Motivic multiple elliptic polylogarithm” with Dr. Pataschinck and Dr. Argawala.
2013: Guest at the Max-Planck Insitute for Mathematics, Bonn
2007-2008: Marie-Curie young researcher, Durham (Sept.-Jan.)

Member of the *DFG Graduiertenkolleg* “Kombinatorische Strukturen in der Geometrie” (Osnabrück Universität).

Former member (2010-2013) of *SBF/TR 45* “Periods, moduli spaces and arithmetic of algebraic varieties” (Essen Universität; MPIM Bonn)

Other teaching experiences

- 2003-2007:** Mathematics teacher at Louis-le-Grand College (2006-2007) and Saint-Louis College (2003-2006).
2002-2008: Private mathematics lessons.

Talks

- 2014 :** - *Around functional equations for polylogarithms*: Madrid, ICMAT “Numbers and Physic” conference (september).
- *A motivic Grothendieck-Teichmuller group over \mathbb{Z}* : “(A)round form cycle and motives” conference, Mainz (september).
- *Bloch cycle complex over a base*: Bristol (May).
- *Cooperad (co)Lie et cycle algébriques sur $\mathbb{P}^1 \setminus \{0, 1, \infty\}$* : Lille, séminaire de topologie (April).
- *Multiple polylogarithm cycles and mixed Tate motives*, Freiburg, (March)
- *Combinatorics of moduli spaces of curves*: Osnabrück, “Kombinatorische strukturen in der Geometrie” seminar.
- *From quantum groups to TQFT*: Osnabrück, Topologie seminar.
- 2013 :** - *Goncharov’s motivic iterated integrals, III*: Essen, Motives seminar.
- *From multiple polylogarithm to algebraic cycles*: MPIM, Oberseminar.
- *Toward multiple zeta values cycles*: MPIM, Number theory seminar.
- *Cycle and motives over $\mathbb{P}^1 \setminus \{3 \text{ pts}\}$* : Lyon, Osnabrück.
- 2012 :** - *Cycles and Mixed Tate motives over \mathbb{P}^1 minus 3 points*: "Periods and Motives" conference, Madrid.
- *Complexe de cycles sur \mathbb{P}^1 moins 3 points et polylogarithmes multiples* : Grenoble, Strasbourg, Toulouse.
- *Cycle complex over \mathbb{P}^1 minus 3 points* : Göttingen, Mainz, Duisburg-Essen .
- *Regular singularities for holonomic \mathcal{D} -modules*, Studies Seminar on D-Modules, Duisburg-Essen.
- 2011 :** - *Around Ayoub specialisation theorem*, AGAT Seminar (Duisburg-Essen Universität).
- 2010 :** - *MZV, espaces de modules de courbe et éclatements*, Séminaire GAM (Paris 13).
- *Géométrie des relations de double mélange*, Séminaire Chevalley (IMJ).
- 2009 :** - *Double mélange motivique*, Strasbourg, Séminaire Quantique, (IRMA, Strasbourg 1).
- *Éclatements à la MacPherson-Procesi et produits de mélanges des valeurs zêta multiples*, Séminaire d’algèbre (Institut Camille Jordan, Lyon 1).
- 2008 :** - *Motifs de Tates mixtes et double shuffle* (Séminaire Polylogarithmes, IMJ).
- *Éclatements et valeurs zêta multiples* (Séminaire des thésards, IMJ).
- 2007 :** - *Geometry of moduli spaces of curves* (ASG, Durham University).