

# CV

ATHANASE PAPADOPOULOS

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## 1. GENERAL

Athanase Papadopoulos

Born in 1957

Position : Directeur de Recherche (1st class).

Employer : Centre National de la Recherche Scientifique.

French citizen

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Work :

Institut de Recherche Mathématique Avancée

(Université de Strasbourg et CNRS)

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67084 Strasbourg Cedex France

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## 2. RESEARCH

Fields of interest : Geometry and topology of low dimensions, complex analysis, metric geometry, combinatorial group theory, dynamical systems, history of mathematics, mathematics and music theory.

(More than 100 publications, including several books.)

## 3. DIPLOMAS

1981 Ingénieur, Ecole Centrale de Paris

1983 Doctorat de troisième cycle (PhD), mathematics, Université de Paris-Sud (Orsay)

1989 Doctorat d'Etat (Habilitation), mathematics, Université de Paris-Sud (Orsay)

## 4. POSITIONS HELD

1983-84 Assistant associé, Université de Paris-Sud, Orsay

Since Octobre 1984 : Full-time researcher at CNRS.

## 5. VISITING POSITIONS (FOR ONE MONTH AND MORE)

December 1983 : Université de Genève.

Juin 1983 : University of Florence

1984-85 Institute for Advanced Study (Princeton)

April 1985 : MSRI (Berkeley)

April-June 1986 : UNAM (Mexico)

Novembre & December 1986 : University of Pisa

February to June 1988 : Max-Plank Institut, Bonn

February to May 1989 : University of Southern California (Los Angeles)

April to June 1990 : Max-Plank-Institut (Bonn)

February 1991 : University of Florence

1993-94 : Institute for Advanced Study (Princeton)

July to September 1994 : Max-Plank Institut, Bonn

March and April 2003 : University of Florence.

March to May 2006 and September 2006 : Max-Plank Institut, Bonn

April 2006 : Center for Topology and Quantization of Moduli Space (Aarhus).

January-February 2009 and July-August 2009 : Max-Plank Institut, Bonn

October 2009 : EPFL (Lausanne).

May 2010 : Hausdorff Mathematics Institute, Bonn  
 April and May 2011 : Max-Planck-Institute, Bonn.  
 January 2011 : Osaka (City University of Osaka).  
 April and May 2011 : Max-Planck Institut, Bonn.  
 November-December 2011 : Osaka (University of Osaka, 1 month)  
 February to April 2013 : Erwin Schrödinger Institut (Vienna).  
 January 2014 : Erwin Schrödinger Institut (Vienna)

## 6. PHD STUDENTS

Vincent Alberge (PhD started in 2012)  
 Ahmad Said (PhD obtained in 2013)  
 Valentina Disarlo (PhD obtained in 2013)  
 Ousama Malouf (PhD obtained in 2011)  
 Moreno Andreatta (Habilitation obtained in 2010)  
 Guillaume Théret (PhD obtained in 2006)  
 Abdelhadi Belkhirat (PhD obtained in 2003)  
 Jean-Christophe Curtillet (PhD obtained in 1998)  
 Mohammed Mesmoudi (PhD obtained in 1994)  
 Michel Coornaert (PhD obtained in 1991)

## 7. ORGANIZATION AND SCIENTIFIC COMMITTEES OF INTERNATIONAL CONFERENCES (THE MOST RECENT ONES)

- September 2014, University of the Aegean (Samos) Conference on Geometry (co-organiser G. Tsapogas, N. A'Campo)
- September 2014, University of Strasbourg, "Riemann, Einstein and geometry" (co-organiser Sumio Yamada)
- September 2012, University of Strasbourg, "Lie, Klein and the Erlangne program" (co-organiser Lizhen Ji)
- June 2014, University of Strasbourg, "Riemann, topology and physics" (co-organiser Lizhen Ji)
- June 2014, Rabat (Marocco) Conference on moduli spaces in honor of Bill Thurston (scientific committee).
- May 2014, University of Strasbourg, Master-class and conference "Around Thurston-Grothendieck-Teichmüller theories".
- April 2014, University of Galatasaray (Istanbul), Master-class and conference on Finsler geometry (co-organisers Muhammed Uludag and Norbert A'Campo).
- February 2014, Oberwolfach, conference on Teichmüller theory (co-organisers R. Penner, S. Morita and A. Weinhard)
- November 2013, University of Galatasaray, Japanese-Turkish Geometry conference (scientific committee)
- Scientific and organisation committee of the RAMJAS International conference on the history of mathematics, Delhi, November 2013.
- September 2013, University of Strasbourg, "Entropy in mathematics and in physics", co-organiser Nicolas Juillet.
- May 2013, University of Samos, Conference on Finsler Geometry (co-organisers G. Tsapogas, M. Uludag, C. Vernicos).
- January to April 2013 : co-organiser (with Penner, Funar and Neretin) of a trimester at the Erwin-Schrödinger Institut (Vienna) on Teichmüller theory. The semester involved also a master-class and two international conferences.
- August 2012 Centre for Quantization, Geometry and Topology, Aarhus. Master class and conference "Around the Ehrenpreis conjecture" (co-organisers R. Penner and J. E. Andersen).

- July 2012 Kunming, China , Conference on “Group Actions and Applications in Geometry, Topology and Analysis”, (co-organisers L. Ji and S. T. Yau)
- Scientific and organisation committee of the RAMJAS International conference on the history of mathematics, Delhi, November 2012.
- American Institute of Mathematics, Palo Alto, October 2012. Co-organisation with Kasra Rafi, Fanny Kassel and Jing Tao of the workshop “Thurston’s metric on Teichmüller space”,
- October 2012. Organisation and scientific committee of the conference “Teichmüller theory and arithmetic”, Galatasaray University, Istanbul,
- June 2012 Strasbourg. : Conference “Mapping class groups and quantum topology”, (I was part of the scientific committee)
- November 2011, University of Galatasaray, Istanbul, “Geometry and arithmetic around Teichmüller theory”, (Scientific committee)
- November 2011 : Conference in honor of Peter Buser, Centre Stefano Francini, Ascona (Scientific committee)
- June-July 2010, EMS-ESF-ERCOM at CRM (Barcelona) “Teichmüller Theory in Mathematics and Physics” (co-organisers R. C. Penner and S. Morita).
- February 2010, Oberwolfach, conference on Teichmüller theory (co-organisers R. Penner and S. Morita)
- June 2009, conference on Teichmüller theory CIRM (Luminy), scientific committee.
- September 2011, Strasbourg, conference on “Lorentz geometry in mathematics and in physics”. (Co-organiser : Charles Boubel).
- September 2011, Strasbourg, conference on “Discretization in mathematics and in physics”. (Co-organiser : Dmitry Millionschikov).
- Membre of the scientific committee of the conference “Mathematics and Computation in Music Conference” (MCM 2011), IRCAM, Paris, 5-17 juin, 2011.
- September 2010, Strasbourg, conference on “Moduli spaces in mathematics and in physics” (co-organiser V. Fock).
- June 2010, Strasbourg, conference on “Geometric aspects of probability and relativity theory”. (Co-organiser : Jacques Franchi).
- September 2009, Strasbourg, conference on “Quantum Topology and Chern-Simons theory” (co-organiser Gwenael Massuyeau)
- June 2009, Strasbourg, conference on “Representation theory in mathematics and in physics”. (co-organiser : S. Souaifi).
- Co-organiser and scientific committee of the “Conference on Geometry and Its Applications”, Polytechnic Institute of Bucharest, October 2008, 2009, 2010, 2011, 2012, 2013.
- Co-organisateur with Xavier Hascher of a yearly symposium in Strasbourg on mathematics and music.

### **Other organization responsibilities**

- In charge of a link (Strasbourg, Zurich, Grenoble, Nice) for the GEAR program (NSF Research Networks in Mathematical Science) “Topology, geometry, and dynamics of character varieties”, 2012-2016.
- In charge of the French ANR research network “géométrie de Finsler et applications”, 2012-2016.
- Organiser of the Geometry and Topology seminar at the University of Strasbourg, since 1991.
- In the last 5 years, I have been in charge (main investigator) of CNRS collaborative projects with China (CNRS-NSFC (Chine), Turkey (CNRS-TUBITAK)

and Switzerland (Germaine de Staël) and in charge of the section “Groupes de difféotopies et espaces de Teichmüller” of the French research network GDR 2105.  
 • Member of the national evaluation committees of the Greek universities, Ioannina (2011), Athens (2012) and Patras (2013).

## 8. BOOK EDITION

I am the editor of the following books ; in each of them I am co-author, sometimes of several chapters :

**8.1. Handbook of Teichmüller Theory.** Several volumes, published by the EMS (European mathematical society). Volume I (2006, Volume II (2008), Volume III (2012), Volume IV (in press), Volume V (in preparation). Collective work, about 20 authors in each volume.

**8.2. Master-class of geometry.** A collection of courses by N. A'Campo - A. Papadopoulos, F. Dal'Bo, G. Link, F. Herrlich, J. Marché, C. Petronio, S. Matveev and V. Schröder. Published by the EMS (2012).

**8.3. Leonhard Euler, Mathématicien, physicien et théoricien de la musique.** Co-editor X. Hascher (musicologist), CNRS Edition, to appear in 2014. The authors are P. Bailhache, D. Foata, X. Hascher, Y. Hellegouarch, Ch. Houzel, F. Jedrzejewski, P. Jehel, G. Théret, A. Kleinert, E. Knobloch, Ch. Théret, F. Nicolas and A. Papadopoulos.

**8.4. The collected musical works of Euler.** Collective book, with R. Caddeo, P. Jehel, X. Hascher and H. Papadopoulos. To appear in 2014, Hermann, Paris, collection GREAM.

**8.5. Handbook of Hilbert Geometry.** (Co-editors G. Besson and M. Troyanov), chapters by Vernicos, Walsh, Lemmens-Nussbaum, Papadopoulos, Papadopoulos-Troyanov, Papadopoulos-Yamada, Marquis, Crampon, Alvarez-Paiva, Guo, Nussbaum, Karlsson, Troyanov, Ohshika-Miyachi-Yamada, I. Kim, to appear in 2014, European Mathematical Society.

**8.6. La théorie des parallèles de Lambert.** Critical edition with English translation and mathematical and historical commentary, to appear in 2014, ed. Blanchard, colle. Sciences dans l'Histoire, Paris.

**8.7. Handbook of Group Actions.** Co-editors Lizhen Ji and S. T. Yau, in 2 volumes. To appear in 2014. Higher Education Press. About 30 authors.

**8.8. Lie and Klein : The Erlangen program and its impact on mathematics and physics.** (Co-editor Lizhen Ji), The authors are : A'Campo-Papadopoulos, Frances, Breuillard, Goenner, Gray, Vinogradov, Meusburger, Zuber, Kosmann-Scharzbach, ed. European Mathematical Society Publishing House, to appear in 2014.

## 9. MONOGRAPHS

**9.1. Géométrie et théorie des groupes : les groupes hyperboliques de Gromov.** (with M. Coornaert and T. Delzant) Lecture Notes in Mathematics, vol. 1441, Springer Verlag, 1990.

**9.2. Symbolic Dynamics and hyperbolic Groups.** (with M. Coornaert) Lecture Notes in Mathematics, Vol. 1539 (1993) Springer Verlag.

**9.3. Lobachevsky's Pangeometry.** Critical edition, with translation and mathematical commentary, Heritage of European Mathematics, Vol. 4, European Mathematics Publishing House, 322 pages, 2010.

**9.4. Metric spaces, convexity and nonpositive curvature.** 300 pages, European Mathematical Society (EMS), Zürich, 2005, second augmented edition, 360 pages, in press (2013).

**9.5. Rigid actions of the mapping class group.** CTQM Master-Class series, European Mathematical Society Publishing House, 150 pages, in preparation.

#### 10. TEACHING

Although my position is a purely research one, I teach regularly at the graduate and undergraduate levels at the University of Strasbourg. I also gave post-graduate courses at several universities (Rome, Osaka, Aarhus) and at Summer Schools (Greece and Algeria).