

# CURRICULUM VITAE

JANNIS A. ANTONIADIS

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University of Crete  
71409 Iraklio, Crete  
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## PERSONAL

Born on 5 of September 1951 in Dryovouno Kozani, Greece.

Married with Sigrid Arnz since 1983, three children : Antonios (26),  
Katerina (23), Karolos (21).

## EDUCATION-EMPLOYMENT

- 1969-1973: B.S. in Mathematics at the University of Thessaloniki,  
Greece.
- 1973-1976: Military Service.
- 1976-1979: Assistant at the University of Thessaloniki, Greece.
- 1979-1981: Graduate student at the University of Cologne, Germany.  
1981 Ph.D. in Mathematics at the University of Cologne.  
Thesis advisor: Prof. Dr. Curt Meyer.
- 1982-1984: Lecturer at the University of Thessaloniki, Greece.
- 1984-1990: Associate Professor at the University of Crete, Greece.
- 1990-now: Professor at the University of Crete, Greece.
- 2003-2007 Chairman of the Department

## VISITING POSITIONS

- University of Cologne Germany, during the period from December 1981 until February 1983 as researcher of the German Research Council (DFG).
- MPI-for Mathematics Bonn Germany, during the periods:
  - from May until September of the year 1985,
  - from May until September of the year 1986,
  - from July until January of the year 1988 and
  - from July until September of the year 1988.
- University of Heidelberg Germany, during the period:  
from September 1993 until January 1994, as visiting Professor.

University of Cyprus, during the period from January 2008 until May 2008, as visiting Professor. Again for the Summer Semester of 2009 and of the Winter Semester 2009-2010.

#### LONG TERM VISITS:

- University of Saarbrücken Germany, for the month April of the year 1986,
- CALTECH Pasadena U.S.A., for the month January of the year 1991,
- MPI-for Mathematics Bonn Germany, for the month March 1991,
- Institute for Experimental Mathematics Essen Germany, for the months May and June of the year 1991,
- University of Heidelberg, for the month July of the year 1992,
- Isaac Newton Institute Cambridge UK, for the month January 1993,
- University of Essen, Germany, for the month June of 1999,
- University of Ostrava, Czech Republic, for the month June of 2004,
- University of Barcelona, Spain, for the month June of 2005

#### CONFERENCES

(The star “\*” will denote that I have given a talk at the corresponding conference)

##### Journées Arithmétiques

Ulm (1987), Geneve (1991\*), Bordeaux (1993), Barcelona (1995\*), Limoges (1997), Rome (1999\*), Lille (2001\*), Graz (2003\*)

##### Oberwolfach

-Algebraic Number Theory (1979), (1981\*), (1984\*), (1986\*), (1988\*), (1990), (1992\*),

Bonn Arbeitstagung , June of 1980 and June of 1981,

Hamburg, February of 1981 (dedicated to the memory of Helmut Hasse).

Yearly Conference of the German Mathematical Society (DMV),

Bayreuth September of (1982\*), Marburg September of (1986\*).

Patras, International Conference on Fibonacci Numbers, August of (1984\*).

MSRI, Iwasawa Theory Berkeley, January of (1987).

Hamburg, August of (1987) (to the memory of Erich Hecke).

Thessaloniki, Arithmetic of Elliptic Curves, May of (1990\*).

Oberwolfach, Modular Forms of Many Variables, July of (1990\*).

Essen, Number Theory and Arithmetic Geometry, March of (1991\*).

Bielefeld , K-Theory, July of (1991).  
Anogeia, Modelltheory of Fields, Crete (1992) (as organizer).  
Cambridge, L-functions and their Arithmetic, January of (1993\* ).  
Anogeia, Arithmetic of Elliptic Curves, July of (1993),(as organizer).  
Heidelberg, Meeting of A.M.S. and D.M.V., October of (1993).  
Athens, 1<sup>st</sup> Panhellenic Conference on Algebra and Number heory, September of (1996).  
Thessaloniki, 2<sup>nd</sup> Panhellenic Conference on Algebra and Number Theory, June of (1998).  
Essen, Germany, Workshop zur Arithmetischen Geometrie, June 7,8 of 2000.  
Anogeia, Galois Representations in Arithmetic Geometry, July of 1998.  
Essen, Mini Conference on Arithmetic Geometry, June of (2000).  
Anogeia, R.Schoof, G. van der Geer, Curves and Abelian Varieties over Finite Fields and their Applications, July 29 to August 4 of (2000).  
Anogeia, 3<sup>rd</sup> Panhellenic conference on Algebra and Number Theory, September of (2000)(as the main organizer).  
Terchova, Slovakia, 5th Polish,Slovak and Czech Conference on Number Theory, June 14 to June 18 of 2004 (invitation for plenary lecture).  
Essen, Germany, From Arithmetic to Cryptology, July 8 to July 10 2004 Conference on the occasion of 60<sup>th</sup> birthday of Prof. Gerhard Frey,(invited speaker).  
Herakleio, Conference in honour of Professor Jannis Papadakis, November 2004, Chairman of the Organizing Committee.  
Anogeia, Number Fields and Curves over Finite Fields, July 23 to July 29 2005.  
Pythagoreio, Samos, Pythagorean thought and scientific logos, September 2 to September 4 2005, (invited speaker).  
Bedlewo, Poland, The 6<sup>th</sup> Czech, Slovak and Polish Conference on Number Theory, June 12 to June 16 2006. (main speaker).  
Athens (National Technical University of Athens), Panhellenic Conference on Algebra, Number Theory and Applications, 1-3 June of 2008.  
Nicosia Cyprus, Workshop on Representation Theory, May 03-09 of 2009 (invited speaker). (Talk has not been given for personal reasons.)  
Beirut, Lebanon, Conference on Modular Forms and Related Topics, 25-31 of July of 2009 (invited speaker)  
Saint Etienne, Journees Arithmetique, 06-10/6/ 2009\*  
Bonn, Mathematische Arbeitstagung 24/6-01/7 /2011(in honor of Don Zagier on his 60<sup>th</sup> Birthday)

## TALKS

Technical University Munich, June 1982,  
University of Crete, September 1983,  
University of Marburg, June 1975,  
University of Heidelberg, August 1985,  
University of Saarbruecken, April 1986,  
MPI for Mathematics Bonn, June 1986,  
University of Erlangen, July 1986,  
University of Thessaloniki, May 1989,  
CALTECH Pasadena, January 1991,  
Amherst University Boston, February 1991,  
University of Essen, June 1991,  
University of Heidelberg, July 1992,  
University of Essen, July 1992,  
Isaac Newton Institute Cambridge, January 1993,  
MPI for Mathematics Berlin, December 1993,  
University of Saarbruecken, May 1998,  
University of Ioannina, April 1999,  
University of Essen, June 1999,  
University of Essen, June 2000,  
University of Augsburg, July 2001,  
University of Athens, December 2001,  
University of Thessaloniki  
University of Kopenhagen "Erasmus", November 2007, a series of lectures.  
University of Cyprus, Summer Semester 2009

## SEMINARS ATTENDED

Seminars of the German Mathematical Society:

1. Arithmetic of Elliptic Curves, G. Harder, M.Kneser, Düsseldorf, September 1981,
2. Analytic Methods at Diophantine Problems, W.M. Schmidt, H.P. Schlickewei, Düsseldorf, September 1983,
3. Transcendence and Diophantine Equations, A. Baker, G. Wüstholtz, Blaubeuern, June 1989,
4. Shimura Varieties, G. Harder, M. Rapoport, Th. Zink, Guenzburg, October 1992.

Gauss Sums and the Local Theory of Langlands, A. Froehlich, Cologne, October-December 1982,

Arithmetic Algebraic Geometry, L. Spiro, Bonn, Summer of 1985,

Transcendence and Diophantine Problems, G. Wuestholz, Bonn, Summer 1985,  
 Seminar on Number Theory, European Cultural Center of Delphi, L. Spiro, J. Oesterle, Athens 1989,  
 The proof of Fermats Last Theorem, Workshop Bielefeld-Bonn-Essen-Cologne-Muenster, 1993/94.  
 Rational Points on Abelian Varieties, P. Roquette, F. Popp,....., Heidelberg 1993/94.  
 The theorem of Ribet, K. Wingberg,....., Heidelberg 1993/94.

## RESEARCH INTERESTS

Number Theory, Cryptography and Coding Theory.

(Groups of automorphisms of algebraic curves. Torsion points on elliptic curves. Elliptic curves with everywhere good reduction. Inverse problem of Galois Theory. )

## PUBLICATIONS

1. "Die ersten 1000 Koeffizienten der absoluten Invariante  $j$  und der Webersehen Funktionen  $g_2$  und  $g_3$ ", Mathematics of Computation, Unpublished Mathematical Tables, 1982.
2. "Über die Kennzeichnung zweiklassiger imaginär-quadratischer Zahlkörper durch Lösungen diophantischer Gleichungen", Journal für die reine und angewandte Mathematik 339( 1983 ), 27-81.
3. "Über die Berechnung von Multiplikatorgleichungen", Acta Arithmetica XLIII( 1983 ), 43-62.
4. "Generalized Fibonacci numbers and some diophantine equations". The Fibonacci Quarterly 23( 1985 ), 199-213.
5. "Fibonacci and Lucas numbers of the form  $z^2 \pm 1$ ". The Fibonacci Quarterly 23( 1985 ), 300-307.
6. "Über die Periodenlänge  $\text{mod } p$  einer Klasse rekursiver Folgen". Archiv der Mathematik 42( 1984 ), 242-252.
7. "Höhere Reziprozitätsgesetze und Modulformen vom Gewicht Eins". Journal für die reine und angewandte Mathematik 361( 1985 ), 11-22.
8. "Diedergruppe und Reziprozitätsgesetz". Journal für die reine und angewandte Mathematik 377( 1987 ), 197-209.

9. "Congruences between cusp forms and Eisenstein series of half-integral weight", (with Winfried Kohnen).  
Abhandlungen Math.Sem.Universitat Hamburg 57( 1987 ), 157-164.
10. "Properties of twists of elliptic curves" (with Michael Bungert and Gerhard Frey ). Journal fur die reine und angewandte Mathematik 405( 1990 ), 1-28.
11. "Modulformen auf mit  $G_0(N)$  rationalen Perioden".Manuscripta Mathematica 74( 1992 ), 359-384.
12. Cyclic covers of the projective line, Manuscripta Mathematica 121( 2006),105-130, (with Aristides Kontogeorgis).

There are two papers which mention my name at their Titles.

These are: 1. B.M.M. de Weger, Number Theory and Applications, Kluwer (1989).

2.Zhenfu Cao, Shanzhi Mu, Xiaolei Dong, J. of N. Th. Vol 83, No2, August 2000.

#### SUPERVISION OF GRADUATE STUDENTS:

**Diploma Thesis.** Marios Magioladitis(2001), Algebrai Curves, Riemanns Conjecture and Coding Theory,  
Manos Kamarianakis (2007), "Deterministic Algorithms and Factorization, The Theorem of Agraval , Kayal and Saxena"

**Master Thesis.** Maria Loukaki (1993),  
Aristeidis Kontogeorgis (1995),  
Thanasses Vessis (1995),  
Giorgos Syligardos (1996),  
Marina Tripolitaki (1997),  
Anna Kagiali (2000),  
Marios Magioladitis (2005),  
Efi Syrrakou (2007) "The Conjecture of Catalan".  
Manos Tsaknakis (2007),"Gauss and Arithmetic"

**Ph.D. Thesis.** Aristeidis Kontogeorgis (1999),  
Giorgos Syligardos (2000),  
Marina Tripolitaki (2003).

#### BOOKS (in Greek):

- Number Theory in the seventeenth and eighteenth century, Heraklio, 1999 (Undergraduate Course),
- Elliptic Curves, the theorem of Mordell, Heraklio, 1999 (Undergraduate Course),
- Applied Algebra, Heraklio, 2000 (Undergraduate Course),
- Representation Theory of Finite Groups, Heraklio, 1996 (Graduate Course),
- Number Theory II (L-series), Heraklio, 1999 (Graduate Course).

## EDITORIAL

**Editor** of the Journals:

“JP Journal of the Algebra Number Theory and Applications”  
 edited by the Pushpa Publishing House, Allahabad 211002, India, since 2002  
 and “Bulletin of the Greek Mathematical Society” since 2005.

## TEACHING EXPERIENCE

### **Undergraduate Courses:**

Number Theory, Fundamentals of Mathematics, Linear Algebra I, Linear Algebra II, Calculus I, Calculus II, Algebra I, Theory of Rings and Modules, Galois Theory, Differential Geometry, Complex Analysis, History of Mathematics (Number Theory of 17<sup>th</sup> and 18<sup>th</sup> century), Special topics in Algebra: Valuation Theory, Cohomology of Finite Groups, Quadratic Number Fields, Applied Algebra, Cryptography, Information Theory and Coding Theory, Number Theory for Candidates School Teachers.

### **Graduate courses:**

Algebraic Number Theory I, Algebraic Number Theory II, Algebraic Geometry, Representation Theory of Finite Groups, Elliptic Curves (The Theorem of Mordell), Algebraic Curves and Cryptography, Algebra I (Commutative Algebra), Algebra II (Field Theory).

### **Seminars:**

On the Theory of Automorphic Forms, Algebraic Function Fields, Number Theory and Representation Theory (Cyprus).....

Research Programm (Thales) Member of the Programm

“Algebraic Modeling of Topological and Computational Structures And Application” Coordinatoe Sophia Lambropoulou, SEMFE, National technical University.