

*Curriculum Vitae*  
**ADEBISI AGBOOLA**

Department of Mathematics  
University of California  
Santa Barbara, CA 93106  
e-mail: agboola@math.ucsb.edu  
url: <http://www.math.ucsb.edu/~agboola>

Office: (805) 893-3844  
Dept.: (805) 893-2171  
Fax: (805) 893-2385  
Home: (805) 685-3050

**Research Interests:**

Number Theory, Arithmetic Algebraic Geometry.

**Regular Faculty Positions:**

- UNIVERSITY OF CALIFORNIA, Santa Barbara (July 2002 – present)  
*Professor*
- UNIVERSITY OF CALIFORNIA, Santa Barbara (July 1998 – June 2002)  
*Associate Professor*
- UNIVERSITY OF CALIFORNIA, Santa Barbara (July 1995 – June 1998)  
*Assistant Professor*
- UNIVERSITY OF CALIFORNIA, Berkeley (July 1992 – June 1995)  
*Charles B. Morrey Assistant Professor*

**Visiting Positions:**

- CIRM, UNIVERSITÉ DE MONTREAL, Montreal (August 2005 – December 2005)  
*Visiting Researcher*
- HARVARD UNIVERSITY, Cambridge (Sept. 1999 – August 2000)  
*Visiting Scholar*
- UNIVERSITÉ DE BORDEAUX I, Bordeaux (May 1998 – June 1998)  
*Professeur Invité*
- INSTITUT HENRI POINCARÉ, Paris (June – July 1997)  
*Member*
- INSTITUTE FOR ADVANCED STUDY, Princeton (Sept. 1995 – August 1996)  
*Member*
- MATHEMATICAL SCIENCES RESEARCH INSTITUTE, Berkeley (Sept. 1991 – August 1992)  
*Postdoctoral Research Fellow*

**Education:**

- COLUMBIA UNIVERSITY, New York  
Ph.D. in Mathematics (May 1991)  
*Adviser: T. Chinburg*
- COLUMBIA UNIVERSITY, New York  
M.A. in Mathematics (May 1988)
- UNIVERSITY OF CAMBRIDGE, Cambridge, England  
Certificate of Advanced Study in Mathematics (with Distinction) (June 1986)

- UNIVERSITY OF CAMBRIDGE, Cambridge, England  
B.A. (Hons.) in Mathematics

(June 1985)

### Grants, Honors and Awards:

- NSF Grant Principal Investigator, ‘Galois Structure, Iwasawa Theory and Arithmetic geometry’ (NSF DMS-040139) (2004–2007)
- NSF Grant Principal Investigator, ‘Arithmetic Geometry and Galois Module Theory’ (NSF DMS-0070449) (2000–2004)
- NSF Grant Principal Investigator, ‘Iwasawa Theory and Arithmetic Geometry’ (NSF DMS-9700937) (1997–2001)
- NSF Mathematical Sciences Postdoctoral Fellowship (1991–1994)
- Columbia University Faculty Fellowship (1987–91)
- College Examination Prize, University of Cambridge (1986)
- College Scholarship, University of Cambridge (1985–86)

### Service:

- Reviewer of NSF grants.
- Referee for: *Annals of Mathematics*, *Mathematische Annalen*, *Crelle’s Journal*, *Journal of Number Theory*, *London Mathematical Society*, *Contemporary Mathematics*, *AMS Transactions*, *Compositio Mathematica*, *Documenta Mathematica*, *Quarterly Journal of Pure and Applied Mathematics*, *Annales de L’Institut Fourier*.
- Department Colloquium Chair, 2001–02.
- Co-organiser, Arithmetic and Geometry Seminar, 1997–present.
- Departmental Library Liason, 1997–98, 2001–03, 2003–04, 2006–present.
- Member, University Southern Regional Library Facility Committee, 1998–99.
- Member, Departmental Graduate Committee, 1997–98, 2000–01.
- Member, Departmental Undergraduate Committee, 1996–97.
- Member, Departmental Recruitment Committee, 1997–present.
- Member, Departmental CCS Committee, 2001–present.
- Chair, Departmental CCS Committee, Fall 2006.
- Member, CCS Executive Committee, Fall 2006.
- Member, Departmental Personnel Committee, 2006–07.
- Departmental MSRI Representative, 2004–present.
- Co-organiser, AMS Special Session on ‘Arithmetic Geometry’, UCSB, April 2005.
- Chair, Departmental CCS Committee, 2007–2008.
- Member, CCS Executive Committee, 2007–2008.

### Personal Data:

Born August 11, 1964, in Ogbomoso, Nigeria.  
U.S. Citizen.

## Bibliography:

1. *Abelian varieties and Galois module structure in global function fields*, Columbia University Thesis, New York, 1991.
2. *Iwasawa Theory of elliptic curves and Galois module structure*, Duke Math. J., **71**, (1993), 441–462.
3. *Abelian varieties and Galois module structure in global function fields*, Math. Zeit., **217**, (1994), 407–419.
4. *Class invariants of Mordell-Weil groups*, (with M. J. Taylor), J. Reine Agnew Math., **447**, (1994), 23–61.
5. *A geometric description of the class invariant homomorphism*, J. de Th. des Nombres de Bordeaux, **6**, (1994), 273–280.
6. *Torsion points on elliptic curves and Galois module structure*, Invent. Math., **123**, (1996), 105–122.
7. *A note on elliptic curves and Galois module structure in global function fields*, American J. Math., **118**, (1996), 427–438.
8. *On  $p$ -adic height pairings and locally free classgroups of Hopf orders*, Math. Proc. Cam. Phil. Soc., **123**, (1998), 447–459.
9. *On the Galois structure of equivariant line bundles on curves*, (with D. Burns), American J. Math., **120**, (1998), 1121–1163.
10. *Line bundles, rational points, and ideal classes*, (with G. Pappas), Math. Res. Letters, **7**, (2000), 709–717.
11. *On primitive and realisable classes*, Compositio Mathematica, **126**, (2001), 113–122.
12. *On arithmetic class invariants*, (with G. Pappas), Math. Annalen, **320**, (2001), 339–365.
13. *Grothendieck groups of vector bundles on schemes over finite fields*, (with D. Burns), K-theory, **23**, (2001), 251–303.
14. *Galois modules and  $p$ -adic representations*, preprint.
15. *Twisted forms and relative algebraic  $K$ -theory*, (with D. Burns), Proc. London Math. Soc. **92** (2006), 1–28.
16. *Anticyclotomic Iwasawa theory of CM elliptic curves*, (with B. Howard, and with an appendix by K. Rubin), Annales, de L’Institut Fourier **56** (2006), 1001–1048.
17. *Anticyclotomic Iwasawa theory of CM elliptic curves II*, (with B. Howard), Math. Res. Letters **12** (2005), 611–621.
18. *On Rubin’s variant of the  $p$ -adic Birch and Swinnerton-Dyer Conjecture*, to appear in Compositio Mathematica.

## **Selected Seminars and Talks:**

### **1990 & 1991**

*Université de Bordeaux I*, Number theory seminar (September 1990)

*CIRM, Luminy, France*, Conference on ‘Structures Galoisiennes arithmétiques’ (September 1990)

*Ohio State University*, Workshop on ‘The arithmetic of function fields’ (June 1991)

### **1992**

*University of Minnesota*, Number theory seminar (January 1992)

*Louisiana State University*, Conference on ‘Quadratic forms and number theory’ (February 1992)

*University of California, Santa Cruz*, Number theory seminar (March 1992)

*Sundance Institute, Utah*, Conference of ‘Arithmetic algebraic geometry’ (May 1992)

### **1993**

*Irsee, Germany*, Conference on ‘Integral Galois structures’ (July 1993)

*University of Minnesota*, Colloquium and number theory seminar (October 1993)

*Arizona State University*, Number theory seminar (December 1993)

### **1994 & 1995**

*Fields Institute, Waterloo, Canada*, Workshop on ‘Galois module structure’ (February 1994)

*University of California, Berkeley/MSRI*, Workshop on ‘Dessins d’enfants’ (April 1994)

*AMS special session*, Arithmetic geometry, Chicago (March 1995)

*Mathematisches Forschungsinstitut Oberwolfach, Germany*, Conference on ‘Orders in arithmetic’ (April 1995)

*University of Pennsylvania*, Workshop on ‘Galois theory’ (October 1995)

### **1996**

*Institute for Advanced Study, Princeton*, Number theory seminar (March 1996)

*University of Maryland*, Number theory seminar (April 1996)

*Boston University*, Number theory seminar (April 1996)

*Columbia University*, Number theory seminar (May 1996)

*University of California, Irvine*, Number theory seminar (November 1996)

## 1997 & 1998

*California Institute of Technology*, Number theory seminar (April 1997)

*AMS special session*, Number theory and arithmetic geometry, Montreal (September 1997)

*University of Southern California*, Number theory seminar (April 1998)

*Université de Bordeaux I*, Several number theory seminars (May–June 1998)

*Anogia, Greece*, Conference on ‘ $p$ -adic representations in arithmetic’ (July 1998)

## 1999 & 2000

*Mathematisches Forschungsinstitut Oberwolfach, Germany*, Conference on ‘Orders in arithmetic’ (January 1999)

*State University of New York, Albany*, Colloquium (October 1999)

*Boston University*, Number theory seminar (February 2000)

*McGill University*, Number theory seminar (March 2000)

*Harvard University*, Number theory seminar (March 2000)

*Columbia University*, Number theory seminar (May 2000)

*Ohio State University*, Number theory seminar (May 2000)

*University of Illinois, Urbana*, Millennial conference on number theory (May 2000)

## 2001 & 2002

*University of California, Irvine*, Southern California algebraic geometry conference (February 2001)

*University of Rome I*, Number theory seminar (March 2001)

*University of Lille*, Conference on ‘Galois modules in arithmetic geometry’ (July 2001)

*Johns Hopkins University*, Number theory seminar (September 2001)

*Mathematisches Forschungsinstitut Oberwolfach, Germany*, Conference on ‘Orders in arithmetic’ (February 2002)

*California Institute of Technology*, Number theory seminar (May 2002)

*Johns Hopkins University*, Conference on ‘Stark’s conjectures and related topics’ (August 2002)

*University of Washington*, Number theory seminar (November 2002)

## **2003 & 2004**

*University of Michigan*, Number theory seminar (April 2003)

*University of California, Irvine*, Number theory seminar (May 2003)

*Mathematisches Forschungsinstitut Oberwolfach, Germany*, Conference on ‘Algebraic number theory’ (July 2003)

*Banff International Research Station, Canada*, Conference on ‘Current trends in arithmetic and geometry’ (August 2003)

*University of Durham, Durham, England*, NoMaDs seminar (September 2003)

*University of California, Berkeley*, Number theory seminar (October 2003)

*University of California, Los Angeles*, Number theory seminar (October 2003)

*University of Chicago*, Number theory seminar (October 2003)

*Vanderbilt University*, Seminar (October 2003)

*Stanford University*, Number theory seminar (February 2004)

*Université de Bordeaux I*, Number theory seminar (November 2004)

## **2005 & 2006**

*UC San Diego*, Southern California Number Theory Day (April 2005)

*Boston University*, Open questions and recent developments in Iwasawa theory, in honour of Ralph Greenberg’s 60th birthday (June 2005)

*McGill University*, Quebec-Vermont number theory seminar (December 2005)

*McMaster University*, Number theory seminar (December 2005)

*University of Utah*, AMS special session on ‘Arithmetic Geometry’ (October 2006)

*Caltech*, Number theory seminar (December 2006)

## **2007 & 2008**

*University of Washington*, Number theory seminar (March 2007)

*University of Arizona*, AMS special session on ‘Arithmetic Geometry’ (April 2007)

**Teaching:**

- UNIVERSITY OF CALIFORNIA, BERKELEY

FALL 1992

*Introduction to abstract algebra*

FALL 1993

*Introduction to complex analysis*

SPRING 1994

*Topics in number theory (graduate course)*

FALL 1994

*Honors introduction to abstract algebra; Introduction to calculus*

SPRING 1995

*Introduction to complex analysis*

- UNIVERSITY OF CALIFORNIA, SANTA BARBARA

FALL 1996

*Abstract algebra I (graduate course)*

WINTER 1997

*Abstract algebra II (graduate course); Calculus 3A*

SPRING 1997

*Calculus 3B; Introduction to p-adic analysis (graduate course)*

FALL 1997

*Algebraic number theory I (graduate course)*

WINTER 1998

*Algebraic number theory II (graduate course); Introduction to complex variable*

SPRING 1998

*Introduction to modular forms (graduate course)*

FALL 1998

*Abstract algebra I (graduate course); Introduction to analysis I*



WINTER 1999

*Abstract algebra II (graduate course); Introduction to analysis II*

SPRING 1999

*Abstract algebra III (graduate course)*

FALL 2000

*Abstract algebra I (graduate course)*

WINTER 2001

*Abstract algebra II (graduate course); Topics in algebra I*

SPRING 2001

*Abstract algebra II (graduate course); Topics in algebra II*

FALL 2001

*Complex variable I (graduate course); Topics in algebra I*

WINTER 2002

*Transition to higher mathematics*

SPRING 2002

*Transition to higher mathematics; Calculus 3A*

FALL 2002

*Topics in algebra I; Introduction to number theory I*

WINTER 2003

*Introduction to number theory II*

SPRING 2003

*Transition to higher mathematics; Introduction to number theory III*

FALL 2003

*Abstract algebra I (graduate course); Topics in algebra I*

WINTER 2004

*Abstract algebra II (graduate course)*

SPRING 2004

*Abstract algebra III (graduate course)*

WINTER 2005

*Introduction to number theory I*

SPRING 2005

*Transition to higher mathematics; Introduction to number theory II*

WINTER 2006

*Number theory I (graduate course); CCS Introduction to analysis*

SPRING 2006

*Number theory II (graduate course); 34B (Calculus for life and social sciences)*

FALL 2006

*CCS Introduction to higher mathematics*

WINTER 2007

*Elliptic curves I (graduate course)*

SPRING 2007

*Elliptic curves II (graduate course); Introduction to number theory*