

**CURRICULUM VITÆ**  
27th January 2012

**Name** Robert Charles VAUGHAN

**Date of Birth** 24th March 1945

**Nationality** British

**Personal**

Married Anita Bernice Bosky, 12th September 1992

One son, Thomas Andres William Vaughan, born 27th June 1994

**Education**

Hillingdon Primary School, 1950-56.

Bishopshalt Grammar School, Hillingdon, Middlesex, 1956-63.

University College, London, 1963-69.

**Qualifications**

B.Sc.(Special) Honours in Mathematics, London University, 1st August 1966.

Ph.D., London University, 20th January 1970. Thesis title "On the representation of numbers as sums of squares, cubes and fourth powers and as sums of powers of primes". Supervisor Professor T. Estermann.

D.Sc., London University, 19th December 1990.

**Honours, Prizes and Fellowships**

Invited Lecturer International Mathematical Congress, Helsinki, 14.08-24.08.1978.

Berwick Prize by the London Mathematical Society, 1979.

Elected Fellow Royal Society 15th March 1990.

EPSRC(formerly SERC) Senior Fellowship, January 1992 – December 1996.

Distinguished Visiting Professor at the University of York, 24th April to 24th May 2008.

## External Examiner

External examiner for Ph.D. thesis of John Porter, University of Nottingham, 1973.

External examiner for University of Nottingham M.Sc. in Number Theory, 1975–1978.

External examiner for Ph.D. thesis of Mark Coleman, University of Cambridge, 1989.

External examiner for Ph.D. thesis of Jason Lucier, University of Waterloo, 2005.

External examiner for Ph.D. thesis of Hung Manh Bui, University of Bristol, January 2008.

## Employment

09.1969-09.1970 Postdoctoral fellow at Nottingham University.

10.1970-09.1972 Junior Research Fellow at Sheffield University.

10.1972-09.1975 Probationary Lecturer in Mathematics at Imperial College London.

09.1974-08.1975 Visiting Assistant Professor at University of Michigan, Ann Arbor.

09.1975-09.1976 Lecturer in Mathematics at Imperial College London.

10.1976-09.1980 Reader in Pure Mathematics at Imperial College London

09.1977-12.1977 Visiting Professor, Mittag-Leffler Institute, Djursholm, Sweden.

10.1980-12.1997 Professor of Pure Mathematics at Imperial College London.

09.1982-12.1983 Visiting Professor at University of Michigan, Ann Arbor.

07.1983-08.1983 Visiting Professor at Macquarie University, Sydney.

10.1988-09.1990 Head of Pure Mathematics Section, Imperial College.

09.1990-05.1991 Visiting Member Institute for Advanced Study, Princeton.

06.1991-08.1991 Visiting Professor at Macquarie University, Sydney.

09.1991-12.1991 Visiting Professor at University of Michigan, Ann Arbor, Michigan.

01.1992-12.1996 EPSRC Senior Research Fellow.

01.02.93-30.04.93 Visiting Professor at the Isaac Newton Institute, Cambridge.

01.1997-12.1997 Visiting Professor at University of Michigan, Ann Arbor, Michigan.

01.1998-04.1998 Visiting Professor at University of Michigan, Ann Arbor, Michigan.

05.1998-12.1998 Visiting Scholar at University of Michigan, Ann Arbor, Michigan.

01.1999- Professor at Pennsylvania State University.

01.2005-07.2005 Visiting Professor at University of Cambridge.

09.2005-12.2005 Visiting Professor at University of Michigan.

24.04.2008-24.05.2008 Visiting Distinguished Professor at University of York.

16.06.2010-08.07.2010 Visiting Professor at University of York.

## **Membership of Learned Bodies**

Ordinary Member London Mathematical Society, elected 19th March 1970.

Fellow Royal Society, elected 15th March 1990.

Ordinary Member American Mathematical Society, 1992.

## **Research Grants, etc.**

£15,000 (with W. W. L. Chen) from SERC for Symposium in Honour of K. F. Roth, July 1985.

SERC Senior Visiting Fellowship for J. H. H. Chalk, October 1987 - September 1988.

SERC Visiting Fellowship for A. D. Pollington, July - August 1988.

SERC Visiting Fellowship for A. D. Pollington, June - July 1992.

SERC Visiting Fellowship for T. D. Wooley, June - July 1992.

EPSRC Visiting Fellowship for A. D. Pollington, June - August 1997.

NSF Research Grant DMS-9970632, July 1999 - June 2002.

NSA Research Grant MDA904-03-1-0082, February 2003 - February 2005.

NSA Research Grant H98230-06-0077, February 2006 - February 2008.

NSA Research Grant H98230-09-1-0015, February 2009 - February 2011.

NSA Research Grant, details to be finalised, February 2012 - February 2014.

## **Teaching duties**

Have taught extensively at all levels of the University curriculum in both England and the United States. This has included lectures on Calculus, Advanced Calculus and Linear Analysis (to both specialists and non-specialists), Real and Complex Analysis to specialist undergraduates, Linear Algebra, and Number Theory to both undergraduates and postgraduates, as well as tutorials in all the more elementary mathematical subjects.

## **Administrative duties**

**Imperial College.** Have served on most of the departmental committees, including the Library committee, Computing committee (Chair 1987-1990), Syllabus committees, Departmental Management Committee, Promotions committee, various Appointment committees, as well as being Head of Pure Mathematics Section 1988-1990. In particular, the latter involved assigning teaching duties, conducting regular personnel assessment exercises and making recommendations to the promotions committee.

## **Penn. State University**

Promotion and Tenure committee 1999–2002.

Chowla Appointments committee 1999–2003.

Manager of Algebra and Number Theory Seminar 2000–.  
Shapiro committee 2002-2006.  
Library committee 2003–2004.  
Colloquium committee 2003–2006.  
Personnel Committee 2006–2009.  
Graduate Studies Committee 2006–2009.  
Distinguished Lecture Committee 2006–2009 (Chair 2007–2009).  
Promotion and Tenure Committee 2009-2012.  
ECoS Promotion and Tenure Committee 2011-2013.  
Class observations of junior faculty.

### **Editorial duties**

Editorial Board, Journal of Number Theory, 1987-....  
Editorial Advisor, Acta Arithmetica, 1990-....  
Editorial Board, Mathematika, 1991-....  
Editorial Board, Philosophical Transactions of the Royal Society of London, A, 1992-7.  
Editorial Board, Central European Journal of Mathematics, 2010-...  
Edited theme issue of the Philosophical Transactions of the Royal Society of London, A, “Theory and applications of numbers without large prime factors”, 345(1993), 327-423.  
Edited theme issue of the Philosophical Transactions of the Royal Society of London, A, “Applications of the Hardy-Littlewood method”, 356(1998), 671-809.  
Analytic Number Theory, Essays in Honour of Klaus Roth, edited by W. W. L. Chen, W. T. Gowers, H. Halberstam, W. M. Schmidt, R. C. Vaughan, CUP, to appear 2008.

### **Conferences organised**

Joint organiser with W. W. L. Chen of Symposium in Honour of K. F. Roth, Imperial College, July 1985.  
Joint organiser with J. Brüdern (Stuttgart) and H. L. Montgomery (U. of Michigan) of “Elementaren und Analytische Zahlentheorie” at Mathematisches Forschungsinstitut Oberwolfach, 9th-15th March 2003.  
Joint organiser with J. Brüdern (Stuttgart) and H. L. Montgomery (U. of Michigan) of “Analytische Zahlentheorie” at Mathematisches Forschungsinstitut Oberwolfach, 9th-15th March 2008.  
Joint organiser with J. Brüdern (Stuttgart), H. L. Montgomery (U. of Michigan) and T. D. Wooley (University of Bristol) of “Analytische Zahlentheorie” at Mathematisches Forschungsinstitut Oberwolfach, October 2013.

### **Graduate Students supervised, and currently mentored**

P. M. Ross, Ph.D. 1976

T. D. Wooley, Ph.D. 1990  
R. A. Ashton, Ph.D. 1993  
W. A. K. Loh, Ph.D. 1994  
M. Dancs, Ph.D. 2002

Jingjing Huang  
Manoj Verma  
Prapanpong Pongsriiam