

SANKAR SITARAMAN

EMPLOYMENT

Math Department, Howard University, Washington, DC. 1994-present
Associate Professor since 2004.

EDUCATION

Ph.D., Mathematics: California Institute of Technology, Pasadena, CA. 1994.
Thesis Advisor: Prof. Dinakar Ramakrishnan

M.Sc. Mathematics, Indian Institute of Technology, Madras, India, 1989.

B.Sc. Mathematics, University of Madras, Vivekananda College,
Madras, India, Aug, 1987.

PUBLICATIONS

Note on Artin's Conjecture on Primitive Roots, Hardy Ramanujan Journal, vol. 44, January 2022

Mean Values of Multiplicative Functions and Artin's Primitive Roots Conjecture, Hardy-Ramanujan Journal, vol. 37, February 2015.

Note on a Fermat-type Diophantine Equation, J. of Number Theory 99 (2003) 29-35

On a Fermat-type Diophantine equation, J. of Number Theory 80 (2000) 174-186

Vandiver Revisited, J. of Number Theory 57 (1996) 122-129

History of Waring's Problem (with P.B. Bhattacharya), Mathematics Student, 61 (1992) 29-53

WORK IN PROGRESS

Working on "Factorization using geometry of complex numbers"

GRADUATE COURSES TAUGHT

Introduction to Probability and Statistics (fall 2010)

Number Theory 2005-06, 2022-23

Number Theory reading course for graduate students (spring 2007)

Modern Algebra, Introduction to Modern Algebra (various semesters)

UNDERGRADUATE COURSES TAUGHT

Patterns in Environmental Mathematics, College Algebra, Calculus, Linear Algebra, Differential Equations, Discrete Structures, Proofs and Problem Solving.

MENTORING

* HALO Green Garden Club, Howard University, Faculty Advisor, 2022-23

* Number Theory Research Advisor for Amoa Salaam, 2022-23.

CONFERENCES

* Joint Meetings, AMS, January 2023

* Joint Meetings, AMS, January 2021

* Eastern sectional meetings of AMS, Fall 2020

* Joint Meetings of Mathematics, Baltimore, MD, January 2019

* [New approaches in probabilistic and multiplicative number theory](#), December 8-12, 2014, CRM, Montréal, Canada.

* Joint Meetings of mathematics, San Diego, CA, January 2013
Paper presented: "Mean Values of Multiplicative Functions"

* Workshop on Cohen-Lenstra Algorithms, June 2011
American Institute of Mathematics, Palo Alto, CA

* "Conference in honor of Atle Selberg," Princeton University, January 2008

* "Anatomy of Integers," Conference on Number Theory, University of Montreal, March 2006

* AMS Special session on L-functions, Bowling green, Kentucky, March 2005

LECTURES AND COLLOQUIA

Number Theory Seminar, series of talks, Howard University math dept, 2021-22.

*Graduate Student Seminar talk on research, April 2021

* Number Theory Seminar, series of talks, Howard University, Fall 2015.

*Mathematics Colloquium, Howard University, Spring 2013

“Mean Values of Multiplicative Functions”

*"Riemann hypothesis, random numbers, and a million dollars" Spring 2008, Amrita University, Coimbatore, India

*"p-divisibility of Bernoulli numbers and Diophantine equations"

19 March 2005, AMS Sectional Conference, Special Session on L-functions, Western Kentucky University, Bowling Green, KY.

* "Riemann Zeta Function," Colloquium, Howard University, 12 Nov 2004

*"Sums of k-th powers and Bernoulli numbers." Colloquium, Howard University, March 7, 2003.

"Fermat-type diophantine equations." Colloquium, Howard University, January 25, 2002.

"Fermat's Last Theorem and Cyclotomic Field Theory." Colloquium, United States Naval Academy, Annapolis, MD, September 15, 1999.

"Vandiver Revisited." Conference on L-functions, Fields Institute of Mathematics, Waterloo, Canada, March 23, 1994.

OTHER ACTIVITIES

Koru meditation classes for Howard Students, 2021-22.

Board member, Children's Environmental Health Network, 2019-2021.

Weekly meditation for Howard Community, Starting March 2020, every Monday, online.

Presentation: “A Gandhian Approach to Climate Change” for DC Science for the People, April 2017.

Taught Patterns in Environmental Math, a course with focus on application to environmental studies. Used guest lectures, Tegrity videos and student projects.

Sabbatical at University of Maryland, 2014-2015. Attended lectures and interacted with faculty.

Board of Trustees of WMC twice on two-year terms, most recently 2018-2020.

Hike leader with Sierra Club Potomac Region and Nature Lovers' meetup

Coordinated activities of teaching committee to review placement process, best teaching practices, etc., and produced report and also coordinated screening tests for incoming calculus and college algebra students.

Reading courses with graduates and undergraduates in addition to regular courses, most recently in fall 2009 on probability and statistics for a graduate student.

Departmental Newsletter editor, 2008-present

Faculty advisor to Howard University Environmental Society, 2009-2012

Sabbatical at Amrita University, Coimbatore, India, Spring 2008

Participated in conference on Cryptography and Coding in Singapore, July 2001.

Co-chair, Mathematics Department Colloquium committee in Math Dept, 2000-2007

Helped prepare Howard University math team (of undergraduates participating in Putnam Exam and regional mathematics competitions), 2002-2013 and 2019-20.

California Institute of Technology Alumni admissions representative, Washington DC area, 2001-2007