

## ARUNABHA BISWAS

Curriculum Vitae  
(October 31, 2019)

### CONTACT INFORMATION

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### ACADEMIC EMPLOYMENT

- 8/2019–present Visiting Assistant Professor, **Virginia Tech**, Blacksburg, VA, U.S.A.  
8/2017–8/2019 Visiting Instructor, **University of North Texas**, Denton, TX, U.S.A.  
8/2015–6/2017 Coleman Post-doctoral Fellow, **Queen’s University**, Kingston, ON, Canada  
Supervisor: M. Ram Murty

### EDUCATION

- 2015 Ph.D. (Mathematics), **Texas Tech University**, Lubbock, TX, U.S.A.  
Dissertation title: *Some aspects of higher Mahler Measure*  
Advisers: Alexander Solynin and Roger Barnard  
2008 M.S. (Mathematics), **University of Texas-Pan American**, Edinburg, TX, U.S.A.  
2003 B.E. (Instrumentation Engineering), **Jadavpur University**, Kolkata, WB, India

### RESEARCH INTEREST

Analytic Number Theory, and Special Functions.

### PUBLICATIONS

- *Asymptotic nature of higher Mahler measure*,  
**Acta Arithmetica**, 166.1 (2014), 15-21.
- *Limiting value of higher Mahler measure*,  
**Journal of Number Theory**, 143 (2014), 357-362 [with C. Monico].
- *Zeta Mahler measure of  $(z^n - 1)/(z - 1)$* ,  
**Hardy-Ramanujan Journal**, 41 (2018), 77-84 [with M. R. Murty].
- *A closed form formula for Zeta Mahler measure of  $(z^n - 1)/(z - 1)$* ,  
**In preparation.**
- *Asymptotic behavior of Mahler measure of Fibonacci’s exponent and coefficient polynomials*,  
**In preparation.**

### TEACHING EXPERIENCE

#### At Virginia Tech

- Differential Equations

Fall 2019

#### AT **University of North Texas**

- Differential Equations I Spring 2019, Fall 2018, Spring 2018, Fall 2017
- Multivariable Calculus Spring 2019, Fall 2018, Spring 2018, Fall 2017
- Calculus II Fall 2018

#### AT **Queen's University**

- Ordinary Differential Equations Fall 2015 & 2016, Winter 2016 & 2017

#### AT **Texas Tech University**

- Higher Math for Engineers & Scientists I – Differential Equation Spring 2015
- Calculus III with Applications Fall 2014, Summer II 2014, Spring 2014
- Calculus II with Applications Fall 2013, Spring 2012
- Calculus I with Applications Summer II '13, Fall '12, Summer I '12, Fall '11
- Linear Algebra Spring 2013
- Precalculus Spring 2011
- Trigonometry Summer I 2011, Fall 2010
- Business Calculus Fall 2009
- Business Analysis Summer II 2009

#### **STUDENT MENTORING**

- Pietra Amaral (of Department of Mechanical and Energy Engineering, University of North Texas): undergraduate honors report

#### **AWARDS**

- Finalists (top 5) of Frank Knox Award for Excellence in Teaching, **Queen's University**, 2015
- SIAM Scholarship, Texas Tech University chapter of the **Society for Industrial and Applied Mathematics**, 2014
- Patrick L. Odell Graduate Student Scholarship, **Texas Tech University**, 2013
- John T. White Graduate Student Scholarship, **Texas Tech University**, 2012
- Gordon Fuller Graduate Student Scholarship, **Texas Tech University**, 2011
- National Scholarship for Secondary Examination, **Government of India**, 1997

#### **RESEARCH TRAVEL GRANTS**

- Professional Travel Grant, 2019-2020, **Virginia Tech**, \$3,000
- To attend GANITA conference, 6/2016, **The Fields Institute**, \$650
- Post-Doctoral Travel Award, 12/2015, **Queen's University**, \$400

- To attend 2015 Midwest Number Theory Conference at University of Illinois at Chicago, 10/2015, NSF (National Science Foundation), \$570
- To attend The Palmetto Number Theory Series at South Carolina State University, 9/2014, NSA (National Security Agency), \$803
- To attend SCHOLAR conference at University of Montreal, Canada, 10/2013, CRM (Centre de Recherches Mathématiques), fully funded
- To attend XXII Rolf Nevanlinna Colloquium at University of Helsinki, Finland, 8/2013, NSF (National Science Foundation), \$2,000
- To attend New Geometric Techniques in Number Theory (summer school) at MSRI, 7/2013, MSRI (Mathematical Sciences Research Institute), fully funded

### INVITED TALKS <sup>1</sup>

- AMS Special Session on Numbers, Functions, Transcendence, and Geometry, **University of North Texas**, Denton, TX, U.S.A., 9/2017
- Mathematics Department Colloquium, **Queen's University**, Kingston, ON, Canada, 2/2017
- Number Theory / Representation Theory Seminar, **University of Wisconsin-Madison**, Wisconsin, WI, U.S.A., 9/2016
- Number Theory Seminar, **University of Waterloo**, Waterloo, ON, Canada, 1/2016
- CMS Winter Meeting, **Canadian Mathematical Society**, Montreal, QC, Canada, 12/2015
- Number Theory Seminar, **Texas A&M University**, College Station, TX, U.S.A., 10/2014
- AMS Special Session on Recent Developments in Number Theory, **Texas Tech University**, Lubbock, TX, U.S.A., 4/2014
- New Geometric Techniques in Number Theory, **MSRI**, Berkeley, CA, U.S.A., 7/2013

### CONTRIBUTED TALKS

- Analytic and Combinatorial Number Theory: A Legacy of Ramanujan - in Honor of Bruce C. Berndt's 80th Birthday, **University of Illinois at Urbana-Champaign**, IL, U.S.A., 6/2019
- Midwest Number Theory Conference, **University of Illinois, Chicago**, IL, U.S.A., 10/2015
- Joint Mathematics Meetings, **American Mathematical Society**, San Antonio, TX, U.S.A., 1/2015
- Palmetto Number Theory Series XXII, **South Carolina State University**, Orangeburg, SC, U.S.A., 9/2014

### POSTER

- XXII Rolf Nevanlinna Colloquium, **University of Helsinki**, Helsinki, Finland, 8/2013

### WORKSHOP AND CONFERENCES ATTENDED

- GANITA conference in Honor of V. Kumar Murty's 60th birthday, **Fields Institute**, Toronto, ON, Canada, 6/2016
- Joint Mathematics Meetings, **Baltimore (MD), San Diego (CA), Atlanta (GA), San Antonio (TX)**, 2019, 2018, 2017, 2015

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<sup>1</sup> Seminar talks at home institutions are not listed.

- New Geometric Techniques in Number Theory - Summer Graduate Schhol, **MSRI**, Berkeley, CA, U.S.A., 7/2013

### **SERVICES**

- Referee for peer-reviewed journal: Journal of Number Theory, Czechoslovak Mathematical Journal
- Reviewer for: MathSciNet