

# Curriculum Vitae

# Zair Ibragimov

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## Position

**California State University, Fullerton**  
Assistant Professor, Fall 2007 - Spring 2013  
Associate Professor, Fall 2013 - Spring 2018  
Professor, Fall 2018 -

## Education

**University of Michigan** Ann Arbor, Michigan, USA.  
Ph.D. in Mathematics, May 2002.  
Area of research: Geometric Function Theory.  
Dissertation topics: *The Apollonian metric, sets of constant width, ring domains.*  
Ph.D. Advisor: Frederick W. Gehring.

**University of Oklahoma** Norman, Oklahoma, USA.  
M.A. in Mathematics, May 1998.

**Novosibirsk State University** Novosibirsk, Russia.  
B.A. in Mathematics, June 1991.

## Teaching Experience

**California State University, Fullerton**, Fall 2007 - Present.  
Intermediate Algebra, College Algebra, Pre-Calculus, Business Calculus,  
Calculus I - III, Differential Equations and Linear Algebra, Probability Theory,  
Modern Algebra, Advanced Calculus I, Advanced Calculus II, Complex  
Analysis, Topology.

**University of Michigan**, Fall 2006 - Spring 2007.  
Visiting Scholar: Probability Theory.

**University of Cincinnati**, Fall 2004 - Spring 2006.  
Visiting Assistant Professor: Calculus I - IV, Applied Calculus.

**University of Texas at Austin**, Fall 2002 - Spring 2004.  
Research Lecturer: Calculus, Intro to Real Analysis, Linear Algebra, Probability  
Theory, Modern Geometries.

**University of Michigan**, Fall 1999 - Spring 2002.  
Graduate Student Instructor: Calculus I - II, Differential Equations.

**University of Oklahoma**, Spring 1995 - Spring 1999.  
Teaching Assistant: Calculus I - II.

## Publications

- [31] M. Borovikova, **Z. Ibragimov**, M. Jimenez Bravo and A. Luna, *One-point, hyperbolic-type metrics*, *Involve, a Journal of Mathematics* (submitted).
- [30] **Z. Ibragimov**, *Möbius invariant Cassinian metric*, *Bull. Malays. Math. Sci. Soc.*, Vol. 42 (4), (2019), 1349-1367.
- [29] A.G. Aksoy, **Z. Ibragimov** and W. Whiting, *Averaging one-point hyperbolic-type metrics*, *Proc. AMS*, Vol. 146 (12) (2018), 5205–5218.
- [28] **Z. Ibragimov**, N. Levenberg, U. Rozikov and A. Sadullaev (Editors), *Algebra, Complex Analysis, and Pluripotential Theory*, Proceedings of the second USA-Uzbekistan Conference on Analysis and Mathematical Physics (Urgench, Uzbekistan, August 8-12, 2017), Springer Proceedings in Mathematics & Statistics, Vol. 264, 2018.
- [27] **Z. Ibragimov**, M.R. Mohapatra, S.K. Sahoo and X.-H. Zhang, *Geometry of the Cassinian metric and its inner metric*, *Bull. Malays. Math. Sci. Soc.*, Vol. 40 (1), (2017), 361–372.
- [26] **Z. Ibragimov**, *A scale-invariant Cassinian metric*, *The Journal of Analysis*, Vol. 24 (1) (2016), 111–129.
- [25] A.G. Aksoy and **Z. Ibragimov**, *Convexity of the Urysohn universal space*, *Journal of Nonlinear and Convex Analysis*, Vol. 17, No. 6, (2016), 1239–1247.
- [24] **Z. Ibragimov**, N. Levenberg, S. Pinchuk and A. Sadullaev (Editors), *Topics in Several Complex Variables*, Proceedings of the first USA-Uzbekistan Conference on Analysis and Mathematical Physics (Fullerton, CA, 2014), Contemporary Mathematics, American Mathematical Society, Vol. 662, 2016.
- [23] **Z. Ibragimov**, *A hyperbolic filling for ultrametric spaces*, *Computational Methods and Function Theory*, Vol. 14, Issue 2 (2014), 315–329.
- [22] **Z. Ibragimov** and J. Simanyi, *Hyperbolic Construction of Cantor sets*, *Involve, a Journal of Mathematics*, Vol. 6, No. 3, (2013), 333–343.
- [21] **Z. Ibragimov**, *Hyperbolization of locally compact noncomplete metric spaces*, *Contemporary Mathematics*, 590, Amer. Math. Soc., Providence, RI, (2013), 51–59.
- [20] **Z. Ibragimov** and T. Le, *n-diameter of planar sets of constant width*, *Involve, a Journal of Mathematics*, Vol. 5, No. 3, (2012), 327–338.
- [19] P. Hästö, **Z. Ibragimov** and D. Minda, *Convex sets of constant width and 3-diameter*, *Houston J. Mathematics*, Vol. 38 (2), (2012), 421–443.
- [18] **Z. Ibragimov**, *Möbius maps between ultrametric spaces are local similarities*, *Ann. Acad. Sci. Fenn., Ser. A I Math.*, Vol. 37 (2012), 309–317.
- [17] **Z. Ibragimov**, *Hyperbolizing Metric Spaces*, *Proc. AMS*, Vol. 139 (12) (2011), 4401–4407.
- [16] **Z. Ibragimov**, *Hyperbolizing Hyperspaces*, *Michigan Math. Journal*, Vol. 60 (2011), 215–239.
- [15] **Z. Ibragimov**, *Quasi-isometric extension of quasisymmetric mappings of  $R$  compatible with a composition*, *Ann. Acad. Sci. Fenn., Ser. A I Math.*, Vol. 35 (2010) 221–233.
- [14] M. Borovikova, **Z. Ibragimov** and H. Yousefi, *Symmetric products of the real line*, *The Journal of Analysis*, Vol. 18 (2010), 53–67.
- [13] **Z. Ibragimov**, *The Cassinian metric of a domain in  $\overline{\mathbf{R}}^n$* , *Uzbek Math. Journal*, **1** (2009), 53–67.
- [12] M. Borovikova and **Z. Ibragimov**, *The Third Symmetric Product of  $R$* , *Computational Methods and Function Theory*, Vol. 9 (1) (2009), 255–268.

- [11] M. Borovikova and **Z. Ibragimov**, *Convex bodies of constant width and the Apollonian metric*, Bulletin, Malaysian Math. Sci. Soc. Vol. 31 (2) (2008), 1–12.
- [10] D. Herron, **Z. Ibragimov** and D. Minda, *Geodesics and curvature of Möbius invariant metrics*, Rocky Mountain J. of Math., Vol. 38 (3) (2008), 891–921.
- [9] P. Hästö, **Z. Ibragimov**, D. Minda, S. Ponnusamy and S. Sahoo, *Isometries of some hyperbolic-type path metrics, and the hyperbolic medial axis*, Contemporary Mathematics 432, Amer. Math. Soc., Providence, RI, (2007), 63–74.
- [8] P. Hästö and **Z. Ibragimov**, *Apollonian isometries of regular domains are Möbius mappings*, Ann. Acad. Sci. Fenn., Ser. A I Math., 32 (1) (2007), 83–98.
- [7] P. Hästö, **Z. Ibragimov** and H. Linden, *Isometries of relative metrics*, Computational Methods and Function Theory, Vol. 6 (1) (2006), 15–28.
- [6] P. Hästö and **Z. Ibragimov**, *Apollonian isometries of plane domains are Möbius mappings*, Journal of Geometric Analysis, Vol. 15 (2) (2005), 229–237.
- [5] **Z. Ibragimov**, *Conformality of the Apollonian metric*, Computational Methods and Function Theory, Vol. 3 (2) (2003), 397–411.
- [4] **Z. Ibragimov**, *On the Apollonian metric of domains in  $\overline{\mathbf{R}}^n$* , Complex Variables, Vol. 48 (10) (2003), 837–855.
- [3] **Z. Ibragimov**, *Möbius modulus of ring domains in  $\overline{\mathbf{R}}^n$* , Ann. Acad. Sci. Fenn., Ser. A I, Math., Vol. 28 (2003), 193–206.
- [2] **Z. Ibragimov**, *Metric density and quasimöbius maps*, Siberian Math Journal, Vol. 43 (5) (2002), 1007–1019.
- [1] **Z. Ibragimov**, *The Apollonian metric, sets of constant width and Möbius modulus of ring domains*, Ph.D. Thesis, University of Michigan, 2002.

## Recent Invited Talks

- Joint Mathematics Meetings (Denver, CO), January 15-18, 2020.
- New Directions in Function Theory, Chapman University, November 21-26, 2019.
- AMS Riverside Meeting, November 9-10, 2019.
- California Institute of Technology, Analysis Seminar, February 15, 2019.
- Joint Mathematics Meetings (Baltimore, MD), January 16-19, 2019.
- Claremont McKenna College, Applied Mathematics Seminar, December 10, 2018.
- AMS San Francisco Meeting, October 27-28, 2018.
- Joint Mathematics Meetings (San Diego, CA), January 10-13, 2018.
- Second USA-Uzbekistan Conference, Urgench (Uzbekistan) August 8-12, 2017.
- Claremont Colleges Colloquium, April 5, 2017.
- Joint Mathematics Meetings (Atlanta, GA), January 4-7, 2017.
- Analysis Workshop, Urgench State University, November 22-23, 2016.
- Analysis and PDE Seminar, University of Cincinnati, November 3, 2016.
- Analysis Seminar, Bowling Green State University, October 31, 2016.
- Fullerton College, May 24, 2016.
- Complex Geometry Conference, University of Cincinnati, May 16, 2015.
- Institute of Mathematics, National University of Uzbekistan, May 4, 2015.
- Modern methods of Math. Physics and applications, Tashkent, April 15, 2015.
- Nazarbayev University, Research Seminar, November 28, 2014.
- International Conference Al-Khorazmiy 2014, Samarkand, September 15, 2014.
- Claremont Colleges Colloquium, April 24, 2013.
- Number Theory Conference, University of Hawaii at Manoa, March 6-8, 2012.
- AMS Honolulu Meeting, March 3-4, 2012.
- Claremont McKenna College, Analysis Seminar, January 23, 2012.

University of Michigan, Geometry Seminar, November 18, 2011.  
 PISRS 2011, University of Messina, Italy, November 8-12, 2011.  
 Current Problems in Analysis, Uzbekistan, August 8-13, 2011 (2 talks).  
 Fullerton College, July 14, 2011.  
 University of California, Riverside, May 19, 2011.  
 AMS Las Vegas Meeting, April 30, 2011.  
 The Triennial Ahlfors-Bers Colloquium, Rice University, March 25, 2011.  
 California State Polytechnic University, Pomona, February 3, 2011.  
 University of California, Los Angeles, October 29, 2010.  
 University of California, Riverside, October 28, 2010 (2 talks).  
 International Congress of Mathematicians, Hyderabad (India) Aug. 19–27, 2010.  
 Harmonic and Quasiconformal Mappings, Chennai (India) August 9–17, 2010.  
 University of California, Irvine, April 2010.  
 Chapman University, April 2010.  
 AMS Albuquerque Meeting, April 2010.

## Service

### Service to Profession

- National Science Foundation Panel  
*Organizer/co-organizer for*
- International Research Experience for Students (IRES),  
Joint Mathematics Meeting, Denver, CO, January 15-18, 2020
- Advances in Operator Theory, Operator Algebras, and Operator Semigroups,  
AMS Western Section Meeting, San Francisco, CA, October 27-28, 2018
- Advances in Operator Theory, Operator Algebras, and Operator Semigroups,  
Joint Mathematics Meeting, San Diego, CA, January 10-13, 2018
- Second USA-Uzbekistan Conference on Analysis and Mathematical Physics,  
Urgench State University, Uzbekistan, August 8-12, 2017
- Analysis on Metric Spaces (in honor of Fred Gehring's 90th birthday),  
AMS Western Section Meeting, Fullerton, CA, October 24-25, 2015
- First USA-Uzbekistan Conference on Analysis and Mathematical Physics,  
Fullerton, CA, May 20-23, 2014
- Analysis and Geometry of Metric Spaces,  
AMS Western Section Meeting, Riverside, CA, November 2-3, 2013
- Topics in Modern Complex Analysis,  
AMS Western Section Meeting, Las Vegas, NV, April 2011

### Service to University

- University Faculty Research Committee (2018 - present)
- Director, NSF IRES program (2017 - 2020)
- Director, CSUF LSAMP program (2017 - present)
- CSUF Deputy Provost search committee (2014)
- CSUF UEE Dean search committee (2016)
- CSU statewide Pre-Doctoral Program committee (2009 - 2015)
- Initiated partnerships between CSUF and five universities in Uzbekistan
- Led CSUF delegation to Uzbekistan for partnership summit, August 2012
- Hosted Uzbekistan Higher Education delegation visiting CSUF, June 2013
- Hosted Uzbekistan Higher Education delegation visiting CSUF, June 2019
- NSM Intramural Grant Review Committee (2014-present)