

# Jaikrishnan Janardhanan

## Personal Information

Name Jaikrishnan Janardhanan  
Date of birth 3rd January, 1988  
Gender Male  
Nationality Indian

## Employment

2015-now **Inspire Hosted Faculty**, *Indian Institute of Technology Madras*, Chennai, India.  
2014-2015 **Research Associate**, *Indian Institute of Science*, Bangalore, India.

## Education

2007-2014 **Integrated Ph.D. in Mathematics**, *Indian Institute of Science*, Bangalore, India.  
(Ph.D. awarded in June 2014)  
2004-2007 **B.Sc. (Honours) in Mathematics**, *Sri Sathya Sai University*, Prasanthinilayam, India.

## Academic Honours

INSPIRE Faculty Award I was selected for the INSPIRE faculty award by the Department of Science and Technology, India.  
Martin Foster Medal I was awarded the Sir Martin Forster medal for the best thesis in Mathematical Sciences for the year 2013-14 by the Indian Institute of Science in July 2015.

## Reports

Ph.D. thesis *On the structure of proper holomorphic mappings*, January, 2014.  
Advisor Gautam Bharali  
M.S. project *Some results on holomorphic mappings of domains in  $\mathbb{C}^n$* , June 2009.  
Advisor Gautam Bharali

## Research Interests

- Several Complex Variables
- Complex Dynamics
- Complex Geometry

## Publications

2018 (with Pranav Haridas) *A 1-point poly-quadrature domain of order 1 not biholomorphic to a complete circular domain*, *Anal. Math. Phys.*, DOI: 10.1007/s13324-018-0263-3

- 2018 (with Pranav Haridas) *A note on the smoothness of the Minkowski function*, arXiv:1805.11023
- 2018 (with Gautam Bharali, Indranil Biswas and Divakaran Divakaran) *Proper holomorphic mappings onto symmetric products of a Riemann surface*, Doc. Math. 23, 1291-1311 (2018), DOI: 10.25537/dm.2018v23.1291-1311
- 2017 (with Divakaran Divakaran) *Finiteness theorems for holomorphic mapping from products of hyperbolic Riemann surfaces*, Internat. J. Math., vol. 28 (2017), 1750060, 12 p. (electronic).
- 2015 *Proper holomorphic self mappings of balanced domains in  $\mathbb{C}^n$* , Math. Z., vol. 280 (2015), no. 1, 257-268.
- 2014 *Proper holomorphic mappings between hyperbolic product manifolds*, Internat. J. Math., vol. 25 (2014), no. 4, 1450039, 10 p. (electronic).
- 2014 (with Gautam Bharali) *Proper holomorphic maps between bounded symmetric domains revisited*, Pacific J. Math., vol. 271 (2014), no. 1, 1-24.

## Talks

- May 2017 **“The Alexander phenomenon”**, Indian Institute of Technology Bombay, Mumbai.
- May 2017 **“Finiteness theorems for holomorphic mapping from products of hyperbolic Riemann surfaces”**, Tata Institute of Fundamental Research, Mumbai.
- November 2016 **“Proper holomorphic mappings of Balanced Domains”**, Centre for Excellence in Mathematical Sciences (CEMS), Almora, Conference and workshop entitled “Complex Analysis: Geometric and Dynamical Aspects”.
- March 2016 **“Continuous Computing and Applications”**, International Institute of Information Technology, Hyderabad.
- June 2015 **“The Jordan–Schoenflies Theorem and Applications”**, Indian Statistical Institute, Chennai Centre.

## Teaching Experience

- June 2018 **Instructor for an Advanced Instructional School in “Several Complex Variables”**, Indian Institute of Science.
- May 2018 **Instructor for a refresher course on “Riemann Surfaces”**, Kerala School of Mathematics.
- May 2018 **Instructor for a refresher course on “Topology”**, Ramanujan Institute for Advanced study in Mathematics.
- Jan-May 2018 **Instructor for the course “Complex Analysis” (MA5360)**, Indian Institute of Technology Madras.
- Jan-May 2017 **Instructor for the course “Series and Matrices” (MA1102)**, Indian Institute of Technology Madras.
- Jul-Dec 2016 **Instructor for the course “Multivariable Calculus” (MA5371)**, Indian Institute of Technology Madras.
- Jan-May 2016 **Instructor for the course “Complex Analysis” (MA5360)**, Indian Institute of Technology Madras.
- Dec 2015 **Instructor and tutor for a short course entitled “Introduction to Several Complex Variables”**, Indian Statistical Institute, Chennai Centre.
- Aug-Dec 2014 **Instructor for the course “Complex Analysis II” (MA 226)**, Indian Institute of Science.
- Aug-Dec 2013 **Teaching Assistant for the course “Calculus I” (UM 101)**, Indian Institute of Science. Serving as an administrative assistant and TA supervisor.

- April 2012 **Tutor for National Board of Higher Mathematics Advanced Instructional School on Geometric Methods in Complex Analysis**, *Indian Institute of Science*.  
Also gave a lecture entitled *The Remmert–Stein theorem for proper holomorphic mappings*.
- Jan-Apr 2012 **Teaching Assistant for the course “Analysis II” (MA 222)**, *Indian Institute of Science*.
- Aug-Dec 2011 **Teaching Assistant for the course “Introduction to Several Complex Variables” (MA 328)**, *Indian Institute of Science*.  
Also served as a substitute teacher.
- March 2010 **Tutor for National Board of Higher Mathematics Advanced Training in Mathematics Workshop on Several Complex Variables and Complex Geometry**, *Indian Institute of Science*.

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## Computer Skills

Languages C, C++, Ruby, Racket, Scala, SML,  
Python

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## References

- Gautam Bharali, Indian Institute of Science, [bharali@iisc.ac.in](mailto:bharali@iisc.ac.in)
- Harish Seshadri, Indian Institute of Science, [harish@iisc.ac.in](mailto:harish@iisc.ac.in)
- Kaushal Verma, Indian Institute of Science, [kverma@iisc.ac.in](mailto:kverma@iisc.ac.in)