

Eshan Chattopadhyay

Contact

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Research Interest

Complexity Theory, Pseudorandomness, Combinatorics, and Cryptography.

Personal Information

Born: September 23, 1989
Citizenship: Indian

Appointments

2016 Fall-present	Postdoctoral Researcher at Institute for Advanced Study, Princeton
2015 Summer, 2016 Summer	Research Intern at Microsoft Research, India
2011-2016	Teaching Assistant and Research Assistant at University of Texas, Austin
2010 Summer	Research Intern at ETH Zurich, Switzerland

Education

August, 2011-May, 2016	Ph.D. in Computer Science , University of Texas, Austin. Advisor: Prof. David Zuckerman. Thesis: Explicit Two-Source Extractors and More.
June, 2007-June, 2011	B.Tech in Computer Science , Indian Institute of Technology, Kanpur

Honors/Awards

Bert Kay Dissertation Award 2016, given for the best doctoral thesis in computer science at UT Austin.

Best Paper Award in STOC 2016.

Dissertation Writing Fellowship awarded by University of Texas at Austin Graduate School for Spring 2016.

US Junior Oberwolfach Fellow, 2015

MCD Fellowship 2011-14 awarded by University of Texas at Austin.

General Proficiency Medal for Best Academic Performance in B. Tech in Computer Science 2007-11, IIT Kanpur.

Best Bachelor's Thesis Award in Computer Science, IIT Kanpur for the year 2011. (thesis title: Pseudorandom generators for polynomials, advised by Prof. Manindra Agrawal.)

All India Rank 101 in Joint Entrance Exam conducted by Indian Institute of Technology in 2007.

Publications/Manuscripts

Non-Malleable Codes and Extractors for Small-Depth Circuits, and Affine Functions

Eshan Chattopadhyay, Xin Li
Manuscript 2016.

Explicit Non-Malleable Extractors, Multi-Source Extractors and Almost Optimal Privacy Amplification Protocols

Eshan Chattopadhyay, Xin Li
FOCS 2016.

Explicit Two-Source Extractors and Resilient Functions

Eshan Chattopadhyay, David Zuckerman
STOC 2016 (Best Paper Award).

Extractors for Sumset Sources

Eshan Chattopadhyay, Xin Li
STOC 2016.

Non-Malleable Extractors and Codes, with their Many Tampered Versions

Eshan Chattopadhyay, Vipul Goyal, Xin Li
STOC 2016.

New Extractors for Interleaved Sources

Eshan Chattopadhyay, David Zuckerman
CCC 2016.

Non-Malleable Codes against Constant-Split State Tampering

Eshan Chattopadhyay, David Zuckerman
FOCS 2014.

On Low Discrepancy Samplings in Product Spaces of Motion Groups

Chandrajit Bajaj, Abhishek Bhowmick, Eshan Chattopadhyay, David Zuckerman
Manuscript, 2014.

An Explicit VC-Theorem for Low-Degree Polynomials

Eshan Chattopadhyay, Adam Klivans, Pravesh Kothari
RANDOM 2012.

Invited Talks

Institute for Advanced Study

Princeton, NJ November 2016
Computer Science & Discrete Math Seminar II

New York University

New York, NY November 2016
Theory Seminar

Institute for Advanced Study

Princeton, NJ October 2016
Mathematical Conversations

Banff International Research Station

Banff, Alberta, Canada September 2016
Workshop on Computational Complexity, 2016

The Chinese University of Hong Kong

Hong Kong August 2016
China Theory Week, 2016

Indian Institute of Science

Bangalore, India August 2016
Theory Seminar

Infosys, Mysore

Mysore, India August 2016
Mysore Park Workshop

Microsoft Research, Bangalore

Bangalore, India August 2016
Theory Seminar

Microsoft Research, Bangalore

Bangalore, India August 2016
Lab Seminar

University of California, Los Angeles

Los Angeles, CA Theory Seminar	May 2016
<i>Cornell University</i>	
Ithaca, NY Theory Seminar	May 2016
<i>Microsoft Research, New England</i>	
New England, MA Theory Seminar	January 2016
<i>Oberwolfach</i>	
Wolfach, Germany Complexity Theory Workshop, specialized session	November 2015
<i>Stellenbosch Institute for Advanced Study</i>	
Stellenbosch, South Africa Workshop on Foundations of Randomness	October 2015
<i>Massachusetts Institute of Technology</i>	
Boston, MA Charles River Crypto Day	October 2015
<i>New York University</i>	
New York, NY Theory Seminar	September 2015
<i>Institute for Advanced Study</i>	
Princeton, NJ Computer Science & Discrete Math Seminar II	September 2015
<i>Institute for Advanced Study</i>	
Princeton, NJ Computer Science & Discrete Math Seminar I	September 2015
<i>Microsoft Research, Bangalore</i>	
Bangalore, India Theory Seminar	June 2015