

Animik Ghosh

(a) Contact Details

- Mailing address: Kohn Hall, University of California at Santa Barbara, CA 93106, USA.
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- Citizenship: India

(b) Education

- University of Kentucky, Lexington, KY; Ph.D. in Physics, 2015-present, GPA: 4.0/4.0 (Thesis Advisor: Sumit R. Das)
- University of Delhi, Delhi, India; M.Sc in Physics, 2014.
- University of Delhi, Delhi, India; B.Sc (Hons.) in Physics, 2012.

(c) Awards and Fellowships

- Graduate Fellowship, Kavli Institute for Theoretical Physics, UCSB, Fall 2019 (Advisor: David J. Gross).
- Dean's Competitive Fellowship, University of Kentucky, Fall 2019.
- Max Steckler Fellowship, University of Kentucky, Spring 2017.
- Virendra Kumar Scholarship for securing highest percentage of marks in M.Sc in St. Stephens College, University of Delhi, 2014.
- Tokyo Mitsubishi UFJ Scholarship for Academic Excellence, 2012.
- Usha (India) Ltd. Prize/medal for the best pre final physics (Hons.) student, St. Stephens College, University of Delhi, 2011.
- Shrimati Kamla Bajaj prize/medal for the best student of Physics, St. Stephens College, University of Delhi, 2011.
- Ramesh Goel Memorial prize/medal for best student in second year, St. Stephens College, University of Delhi, 2010.
- Tushar Nagia prize/medal for securing the highest percentage of marks in First year of B.Sc, St. Stephens College, University of Delhi, 2010.
- Sumitomo-St. Stephens Scholarship for Academic Excellence, 2009.
- INSPIRE Scholarship for being in the top 1 per cent bracket in board examinations throughout India, 2009.
- Samarpan Basu award for securing the highest marks in Physics, Chemistry and Mathematics in Class 12 board examinations, Calcutta Boys' School, 2009.

(d) Previous Research Experience

2014–2015: **Visiting Research Student**, Tata Institute of Fundamental Research, Mumbai, India
(Advisor: Shiraz Minwalla)

(e) Publications

- S.R. Das, **A. Ghosh**, A. Jevicki, and K. Suzuki. Three Dimensional view of arbitrary q SYK models. *Journal of High Energy Physics*. 2018. doi:10.1007/JHEP02(2018)162
- S.R. Das, **A. Ghosh**, A. Jevicki, and K. Suzuki. Space-Time in the SYK model. *Journal of High Energy Physics*. 2018. doi:10.1007/JHEP07(2018)184
- S.R. Das, **A. Ghosh**, A. Jevicki, and K. Suzuki. Duality in the Sachdev-Ye-Kitaev model. In: *Springer Proc.Math.Stat.* 255 (2017) 43-61 , 2017. doi:10.1007/978-981-13-2179-5_4
- **A. Ghosh**, H. Maxfield, and G.J. Turiaci. A universal Schwarzian sector in two-dimensional Conformal Field Theories. *arXiv e-print: 1912.07654* (2019)

(f) Ongoing Research Projects

- “*The Bulk dual of large q SYK*”, with Sumit Das, Antal Jevicki and Kenta Suzuki (ongoing).
- “ *$T\bar{T}$ /Wheeler deWitt*”, with Jorrit Kruthoff and Gustavo J. Turaci (ongoing).

(g) Conferences and schools attended

- Workshop on Qubits and Spacetime, Institute for Advanced Study, Princeton (December 2019).
- Prospects in Theoretical Physics (PITP) - “*From Qubits to Spacetime*”, Institute for Advanced Study, Princeton, (July 2018).
- Great Lakes Strings conference, University of Chicago, (April 2018).
- Theoretical Advanced Study Institute (TASI), - “*Anticipating the Next Discoveries in Particle Physics*”, University of Colorado, Boulder (June 2017).
- Great Lakes Strings conference, University of Cincinnati, (April 2017).

(h) Talks and Presentations

- “*Constructing the bulk of the SYK model*” - Local’s Lunch, Kavli Institute for theoretical physics, Santa Barbara (July 2019).
- “*A three dimensional view of the SYK model*” - Indian Association for the Cultivation of Science, Kolkata, India (December 2017), Great Lakes Strings Conference, University of Chicago (2018), PITP, Institute for Advanced Study, Princeton (2018).

(i) Teaching Experience

- Laboratory Instructor, PHY 211/ 241 (Undergraduate level mechanics), University of Kentucky, Fall 2015, Spring 2016, Summer 2017 and 2018.

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- Recitation Instructor, PHY 231/232 (Undergraduate level electricity and magnetism), University of Kentucky, Fall 2016, Summer 2016.
 - Grader, PHY 228 (Undergraduate level Optics, Relativity and Thermal Physics), University of Kentucky, Spring 2016.
 - Grader, PHY 632 (Graduate level Statistical Mechanics), University of Kentucky, Spring 2017, Spring 2018.
 - Grader, PHY 605 (Graduate level General Relativity), University of Kentucky, Spring 2017.
 - Grader, PHY 611 (Graduate level Electromagnetic Theory), University of Kentucky, Fall 2017, Fall 2018.
 - Grader, PHY 616 (Graduate level Quantum Field Theory), University of Kentucky, Fall 2017, Fall 2017.
 - Grader, PHY 500 (Introduction to Quantum Information Theory), University of Kentucky, Spring 2019.
 - Grader, PHY 416 (Undergraduate level Electricity and Magnetism), University of Kentucky, Spring 2019.

(j) Other Skills

- Software: Mathematica, \LaTeX .
- Programming: C, C++, Python, Java.