
Academic Report (2020-21)



Harish - Chandra Research Institute
Chhatnag Road, Jhunsi
Prayagraj - 211019, India

3. Sk Sazim, Michal Sedlak, Kratveer Singh, Arun K Pati, *Classical Communications with Indefinite Causal Order for N completely depolarizing channels*, arXiv:2004.14339 .
4. Brij Mohan, Arun K Pati, *Reverse Quantum Speed Limit: How Slow Quantum Battery can Discharge?*, arXiv:2006.14523 .
5. Pratyusha Chowdhury, Arun K Pati, Jing-Ling Chen, *Dismantling Wave-Particle Duality with Quantum Cheshire Cat*, arXiv:2009.00545
6. Jasleen Kaur, Shrobona Bagchi, Arun K Pati, *Remote Creation of Quantum Coherence via Indefinite Causal Order*, arXiv:2103.04894 .

Invited Lectures/Seminars:

1. Delivered a Seminar on five day Online Symposium on Quantum information and Computation during June 29- July 3, 2020 at IIIT, Hyderabad.
2. Delivered a Keynote talk in the International Webinar on Fundamental Sciences and Quantum Technologies using Atomic Systems (FSQT 2020), held at PRL, Ahmedabad from 28th September to 1st October, 2020.
3. Delivered a popular talk to motivate College students in Hinjilicut College, Odisha on October 3, 2020.
4. Delieverd two talks at Faculty Development Program on Quantum Information and Computation, held at NIT, Sikkim during 5th to 17th October 2020.
5. Delivered physics online colloquium at IIT Gandhinagar on 21st October, 2020 4:30 PM (IST) on “ Conservation of Quantum Information”.
6. Delivered a special Webinar at Department of Physics, University of Kerala on “Quantum Information Technology” on 14th Dec 2020 at 3:30pm, as a part of the Webinar series to celebrate the 50th anniversary of the Department.
7. Delivered a Plenary talk in Young Scientists' Conference(YSC), IISF on Dec 23, 2020 held at NPL, Delhi from 22-24 Dec 2020. Plenary session was on Frontier Areas of Basic and Applied Sciences-Physical Science.
8. Delivered an online Seminar on “Mysteries in Quantum Physics” to motivate College students at Gunupur College, Odisha on 15 Jan 2021 at 4.00 pm.

Academic recognition/Awards:

- Ranks in top 1% Scientists in the world in General Physics and in top 2% Scientists in the world from all branches of Science– a study conducted by the Stanford University in 2020.
- Received “Distinguished Alumni Award” from Berhampur University, Berhampur, Odisha in January 2021.