

- (1) **Name:** SUJIT KUMAR CHOUDHARY
- (2) **Present Affiliation:** C. M. Science College,  
Post-Lalbagh, District- Darbhanga,  
Pin- 846004 Bihar (INDIA).
- (3) **Educational Qualification:** M. Sc., Ph.D.
- (4) **Research Interests:** Foundations of Quantum Mechanics  
and Quantum Information Science

**(5) Professional Experience:**

**(a) Teaching**

**(i) Undergraduate**

Classical Mechanics, Electricity and Magnetism, Thermodynamics, Quantum Mechanics.

**(ii) Postgraduate**

Classical Mechanics, Quantum Mechanics, Electrodynamics, Mathematical Physics, Nuclear Physics.

**(b) Research**

JRF, SRF (Indian Statistical Institute, Kolkata),  
PDF (The Institute of Mathematical Sciences, Chennai  
and UKZN, Durban (SA)).

**(c) Reviewing**

International Journal of quantum information (World Scientific),  
Quantum Information and Computation (Rinton Press),  
International Journal of Theoretical Physics (Springer),  
Annals of Physics (Elsevier).

**(6) Publications:**

**Journal-articles (peer-reviewed)**

1. **Measuring higher-dimensional entanglement**  
Authors: C. Datta, P. Agrawal and Sujit K. Choudhary  
Published: *Physical Review A* **95**, 042323 (2017).
2. **The Hardy's nonlocality argument**  
Authors: Sujit K. Choudhary and P. Agrawal  
Published: *International Journal of Quantum Information* Vol.14, No.6,1640035 (2016).
3. **Role of Measurement Incompatibility and Uncertainty in Determining Nonlocality**  
Authors: G. Kar, S. Ghosh, Sujit K. Choudhary and M. Banik  
Published: *Mathematics* **4(3)**,52 (2016).
4. **Quantum nonlocality via local contextuality with qubit-qubit entanglement**  
Authors: D. Saha, A. Cabello, Sujit K. Choudhary and M. Pawłowski  
Published: *Physical Review A* **93**, 042123 (2016).
5. **Temporal correlations and device-independent randomness**  
Authors: S. Mal, M. Banik and Sujit K. Choudhary  
Published: *Quantum Information Processing* (Springer) ,Vol. 15, Issue 7, pp 2993-3004 (2016).
6. **Process tomography via sequential measurements on a single quantum system**  
Authors: H. Bassa, S. K. Goyal, Sujit K. Choudhary, H. Uys, L. Diósi, and T. Konrad  
Published: *Physical Review A* **92** 032102 (2015).
7. **Ontological models, preparation contextuality and nonlocality**  
Authors: M. Banik, S. S. Bhattacharya, Sujit K. Choudhary, A. Mukherjee, A. Roy  
Published: *Foundations of Physics*, **44**, 1230-1244 (2014).
8. **Implementation schemes for unsharp measurements with trapped ions**  
Authors: Sujit K. Choudhary, T. Konrad, H. Uys  
Published: *Physical Review A*, **87**, 012131 (2013).
9. **Comment on "Gisin's theorem for arbitrary dimensional multipartite states"**  
Authors: Sujit K. Choudhary, S. Ghosh, G. Kar and R. Rahaman  
Published: *Physical Review Letters*, **105**, 218901 (2010).
10. **Analytical proof of Gisin's theorem for three qubits**  
Authors: Sujit K. Choudhary, S. Ghosh, G. Kar, R. Rahaman  
Published: *Physical Review A*, **81**, 042107 (2010).
11. **Hardy's non-locality and generalized non-local theory**  
Authors: Sujit K. Choudhary, S. Ghosh, G. Kar, S. Kunkri, R. Rahaman and A. Roy  
Published: *Quantum Information and Computation*, Vol. 10, No. 9 & 10 (2010) 0859-0871.

12. **Local cloning of genuinely entangled states of three qubits**  
 Authors: Sujit K. Choudhary, G. Kar, S. Kunkri, R. Rahaman, and A. Roy  
 Published: *Physical Review A*, **76**, 062312 (2007).
13. **Local cloning of entangled qubits**  
 Authors: Sujit K. Choudhary, S. Kunkri, R. Rahaman, and A. Roy  
 Published: *Physical Review A*, **76**, 052305 (2007).
14. **Causality, joint measurement and Tsirelson's bound**  
 Authors: Sujit K. Choudhary, G. Kar, S. Kunkri and R. Rahaman  
 Published: *Physics Letters A*, **371** (2007) 395-398.
15. **A new proof of non-existence of probabilistic quantum cloning machine**  
 Authors: S. Kunkri and Sujit K. Choudhary  
 Published: *International Journal of Quantum Information*, Vol. 5, No. 4 (2007) 611-616.
16. **Special Relativity, Causality and Quantum Mechanics-I**  
 Authors: G. Kar, S. Kunkri and Sujit K. Choudhary  
 Published: *Resonance*, Vol.-11, No.-8, P- 41-52 (2006).
17. **Special Relativity, Causality and Quantum Mechanics-II**  
 Authors: G. Kar, S. Kunkri and Sujit K. Choudhary  
 Published: *Resonance*, Vol.-11, No.-9, P- 43-54 (2006).
18. **Nonlocality without inequality for almost all two-qubit entangled states based on Cabello's nonlocality argument**  
 Authors: S. Kunkri, Sujit K. Choudhary, A. Ahanj and P. Joag  
 Published: *Physical Review A*, **73**, 022346 (2006).
19. **No-flipping as a consequence of no-signalling and non-increase of entanglement under LOCC**  
 Authors: I. Chattopadhyay, Sujit K. Choudhary, G. Kar, S. Kunkri and D. Sarkar  
 Published: *Physics Letters A*, **351** (2006), 384 - 387.
20. **Nonlocality without inequality for spin-s systems**  
 Authors: S. Kunkri and Sujit K. Choudhary  
 Published: *Physical Review A* **72**, 022348 (2005).

#### Conference Proceedings (peer-reviewed)

1. **Nonlocality arguments in the temporal Clauser-Horne-Shimony-Holt scenario**  
 Authors: Sujit K. Choudhary, S. K. Goyal, T. Konrad  
 Published: *Proceedings of SAIP 2012*, page 557-560, ISBN: 978-1-77592-070-0 (2014).
2. **Unsharp measurement in Quantum Mechanics and its application to monitor Rabi Oscillations**  
 Authors: Sujit K. Choudhary, H. Uys, T. Konrad  
 Published: *Proceedings of SAIP 2012*, page 582-585, ISBN: 978-1-77592-070-0 (2014).
3. **Non-locality without inequality and generalized non-local theory**  
 Authors: Sujit K. Choudhary  
 Published: *Proceedings of SAIP 2011*, page 774, ISBN: 978-1-86888-688-3 (2011).
4. **Cloning entanglement locally**  
 Authors: Sujit K. Choudhary and R. Rahaman  
 Published: *Statistical Science And Interdisciplinary Research* Vol. 9 (2010).

- (7) Conference/Workshop:**
- (a) Attended** International-11  
National -12
  
  - (b) Presentations:**
    - (i) Invited Talk** International-2  
National-2
    - ii) Oral Presentation:** 4
    - ii) Poster Presentation:** 3