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Employment History :

1) Post Doctoral Fellow attached to Indian Statistical Institute, Kolkata (1977-1981).

2) CSIR Pool Officer attached to Indian Statistical Institute, Kolkata (1982-1984).

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Complete List of Publications:

1.**Ideals and multipliers of a class of integral functions** (jointly with S.K.Bose). Demonstratio Mathematica, 267-270, (1976) MR.No.11068 (1977).

2.**Multipliers into a class of analytic functions**.Demonstratio Mathematica, 893-897, (1985) MR.No.88k:30061(1988).

3.H^∞ **interpolation into a class of analytic functions.** Demonstratio Mathematica, 841-845, (1990) MR.No.92j:30034(1992).

4.**Quantum flows with infinite degrees of freedom and their perturbations** (jointly with K.B.Sinha).QP-7,World Scientific, 109-123, (1992). MR.No. 94b:81053 (1994).

5.**A note on the cohomology of Quantum flows**.QP-8,World Scientific 119-122, (1993).MR.No.95d:46073(1995).

6.**Quantum stochastic flows** (1995).Review Bull.Cal.Math.Soc.3(1),99-106 (1995).MR.No.99b:00016(1999).

7.**Eigenvectors of backwardshift on a deformed Hilbert space.** International Journal of Theoretical Physics.vol.37,no.9, 2363-2364, (1998).

Erratum: "Eigenvectors of backwardshift on a deformed Hilbert space". International Journal of Theoretical Physics.vol.38,no.7, 2363-

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8.**Phase distribution of Kerr vectors in a deformed Hilbert space.** International Journal of Theoretical Physics.vol.38,no.6, 1807-1825, (1999),MR. No. 2000j: 81100(2000).

9.**Even and odd coherent vectors in a deformed Hilbert space.** International Journal of Theoretical Physics.vol.38,no.10, 2671-2679, (1999), MR.No. 2001b : 81054(2001).

10.**Shifts on a deformed Hilbert space.** International Journal of Theoretical Physics.vol.39,no.01, 47-50, (2000), MR. No. 2000m: 81087(2000).

11.**Probability operator measure and phase measurement in a deformed Hilbert space.** International Journal of Theoretical Physics.vol.39, no.04, 1037-1048, (2000), MR. No. 2001h: 81037(2001).

12.**Erratum:Phase distribution of Kerr vectors in a deformed Hilbert space.** International Journal of Theoretical Physics.vol.39,no.04, 1807-1815, (2000), MR. No. 2001g: 81114(2001).

13.**Coherent vectors as eigenvectors of a backwardshift on a deformed Hilbert space.** International Journal of Mathematics, Game Theory and Algebra, vol. 11, no. 2, 81-89, (2001).

14.**Orthogonal Even Nonlinear Coherent States.** International Journal of Theoretical Physics. vol. 39, no. 08, 2007-2012, (2000).

15. **Phase Distribution in a Deformed Hilbert Space**. Trends in Contemporary Infinite Dimensional Analysis and Quantum Probability, Italian School of East Asian Studies Natural and Mathematical Sciences Series 3, 137-145, Kyoto 2000.

16. **Nonlinear phase changes in a deformed Hilbert space**. International Journal of Theoretical Physics. vol. 40, no. 04, 819-833, (2001), MR. No. 2002e: 81260 (2002).

17. **Squeezed vector and its phase distribution in a deformed Hilbert space**. International Journal of Theoretical Physics. vol. 40, no. 04, 807-818, (2001), MR. No. 2002e: 81259 (2002).

18. **Homodyne statistics of a vector on a deformed Hilbert space**. International Journal of Theoretical Physics. vol. 40, no. 09, 1631-1645, (2001), MR. No. 2002h: 81305 (2002).

19. **Correction to phase operator on a deformed Hilbert space**. International Journal of Theoretical Physics. vol. 41, no. 02, 371- 373, (2002).

20. **Coherent states and squeezed states in interacting Fock space**. International Journal of Theoretical Physics. vol. 41, no. 06, 1099-1106, (2002), MR. No. 2003e: 81091 (2003).

21. **Quasiprobability distribution and phase distribution in interacting Fock space**. International Journal of Theoretical Physics. vol. 41, no. 10, 2013-2024, (2002), MR. No. 2003j: 81098 (2003).

22. **Phase measurement in interacting Fock space**(jointly with Luigi Accardi). InternationalJournal of Theoretical Physics. vol.42, no. 11, 2721-2734, (2003), MR. No. 2005h:81043(2005).

23. **Coherent vectors as eigenvectors of a backwardshift on a deformed Hilbert space**. Recent research on pure and applied algebra. Nova Science publishers, Hauppauge, NY, 67-75, (2003).

24. **Time Evolution of the Phase Operator in Interacting Fock Space**. International Journal of Modern Physics B, Vol. 18 no. 16, (2004), 1-19.

25. **Evolution of Atom-Field system in Interacting Fock Space**, QP-PQ: Quantum Probability and White Noise Analysis, Vol. 18, World Scientific, 141-152, (2005), MR. no. 2211886(2006).

26. **Phase Changes in Non Linear Processes in Interacting Fock Space** (Jointly with Arpita Ghosh), International Journal of Modern Physics B, vol. 20, No. 4, 433-444,(2006).

27. **State space modelling of quantum feedback control system in interacting Fock space** (jointly with B.C.Roy), International Journal of Control, vol.79, no. 07, 729-738,(2006), MR. no. 2006m:81153(2006).

28. **Phase operator on a deformed Hilbert space**. Int. J. Math. Game Theory Algebra, vol. 15, no. 1, 71-85, (2006), MR. no. 2007i:81128(2007).

29.**Optimal control of Multi-level quantum system with energy cost functional** (jointly with B.C.Roy), International Journal of Control, vol.80(8), 1299-1306(2007), MR. no. 2008i:49061(2008).

30. **Stability analysis of quantum mechanical feedback control system** (jointly with B. C. Roy), QP-PQ: Quantum Probability and White Noise Analysis, Vol. 20, World Scientific, (2007), MR. no. 2008k:81350(2008).

31. **Quasi-probability Distribution of Nonclassical States in Interacting Fock Space** (jointly with Arpita Ghosh), Banach Center Publications, vol.78, Institute of Mathematics, Polish Academy of Science, Warsawa, 81-90, (2007).

32. **Influence of cavity decay on phase distribution and Rabi flopping in cavity QED** (jointly with Arpita Ghosh), International Journal of Theoretical Physics, vol. 47, no. 6, 1731-1741, (2008).

33. **Generation of a superposition of coherent states in a resonant cavity and its nonclassicality and decoherence** (jointly with Arpita Ghosh), Canadian Journal of Physics, 86(6): 811-818, (2008).

34. **Phase distribution of entangled state in interacting Fock space** (jointly with Arpita Ghosh), International Journal of Modern Physics B, vol. 23, Issue: 10, World Scientific, 2329-2337(2009).

35. **Direct measurement of phase and quasiprobability distributions of states in cavity QED** (jointly with Arpita Ghosh), Modern Physics Letters B, vol.23, issue 4(2009), 575-581.

36. **Modelling of quantum networks of feedback QED systems in interacting Fock space** (jointly with B. C. Roy), International Journal of Control, vol.82, issue 12, 2267-2276,(2009).

37. **Dynamics of cavity QED in stochastic field in interacting Fock space**, From Physics to Control Through an Emergent View, World Scientific Series on Nonlinear Science, Series-B, vol.15, 45-50, (2010).

38. **Interaction of a three-level atom with a single-mode field in a two photon resonant cavity** (jointly with Debraj Nath), International Journal of Modern Physics B, vol. 25, No.3(2011),417-431.

39. **Berry phase of atom-field system in interacting Fock space** (jointly with Prasanta Haldar), Modern Physics letters B, vol. 25, No.(2011), 1769-1778, MR.No. 2012i:81112(2012).

40. **Wehrl Entropy of the state in a two-atom Tavis-Cummings model** (jointly with Debraj Nath), Banach Center Publications, vol.96, Institute of Mathematics, Polish Academy of Science, Warsawa, 277-285, (2012).

41. **Optimal control of quantum mechanical system with weighted energy cost functional**, Cybernatics And Physics Archives,Russia(2012).

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43. **Nonclassical states in interacting Fock space** (jointly with Prasanta Haldar), Infinite Dimensional Analysis, Quantum Probability and Related Topics,Vol.16,No.2,1350015,(2013).

44. **Optimal Control of a Spin System with Weighted Energy Cost Functional**, International Journal of Mathematics, Game Theory and Algebra,Vol.22, No.4,371-392,(2014).

Ph.D Supervision (awarded) :
Dr. Arpita Ghosh was awarded Ph.D from Jadavpur University in the year 2010.
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