

**PARTHA PRATIM DEY**  
Professor  
Department of Mathematics & Physics  
North South University  
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**ACADEMIC QUALIFICATIONS:**

1. Ph.D. in Mathematics (1994), Bowling Green State University, Ohio, USA.
2. M.A. in Mathematical Sciences (1989), University of Montana, Missoula, Montana, USA.
3. Certificate on Computer Aided Macro-Modeling (1985), Bangladesh University of Engineering and Technology, Dhaka, Bangladesh.
4. Certificate of Fourth Foundation Training Program (1984), Civil Officer's Training Academy, Dhaka, Bangladesh.
5. Certificate on Economics and Development Planning (1983), Bangladesh Academy for Planning and Development, Dhaka, Bangladesh
6. M.S. in Physics and Mathematics (1981), Lenin State University, Minsk, USSR (former).

**PROFESSIONAL EXPERIENCES:**

1. Research Officer (1982-1987), Planning Commission, Dhaka, Bangladesh.
2. Teaching Assistant (1987-1989), University of Montana, Montana, USA.
3. Teaching Fellow (1989-1994), Bowling Green State University, Ohio, USA.
4. Instructor (1994-96), Bowling Green State University, Ohio, USA.
5. Teacher (1997-1998), Scholastica, Dhaka, Bangladesh.
6. Assistant Professor (1998-2003), Department of Computer Science, North South University, Dhaka, Bangladesh.
7. Associate Professor (2003-2008), Department of Computer Science, North South University, Dhaka, Bangladesh.
8. Professor (2008-2014), Department of Electrical Engineering & Computer Science, North South University, Dhaka, Bangladesh.
9. Professor(2014-till date), Department of Mathematics & Physics, North South University, Dhaka , Bangladesh

**AWARDS:**

1. Bangladesh Soviet Scholarship (1976-1981), Lenin State University, Minsk, USSR.
2. UNDP Scholarship for a course on Computer Aided Macro-Modeling (1984-1985), offered at the Bangladesh University of Engineering and Technology, Dhaka, Bangladesh.
3. Distinction in Analysis (1988) at the MA Comprehensive Exam at University of Montana, Montana, USA.
4. Non-Service Research Fellowship (1993) at the Bowling Green State University, Ohio, USA.
5. United Nations University Fellowship (October 15-November 9, 2001) for An Orientation Course on Theoretical Aspects of Computer Science (for College/University Teachers from South Asia), offered at The Institute of Mathematical Sciences, Chennai, India.
6. IIT-ISI (Indian Institute of Technology – Indian Statistical Institute) Fellowship (December 2-21, 2002) for Instructional Workshop & International Conference on Geometric Group Theory, offered at Indian Institute of Technology, Guwahati, India.

## **SELECTED CONFERENCE PROCEEDINGS PUBLICATIONS:**

1. P. Dey. "Centralizers of the Codes of an Affine Plane", Proceedings of International Conference on Computer and Information Technology, Dhaka (2000).
2. P. Dey. "Code of an Affine Plane", Proceedings of International Conference on Computer and Information Technology, Dhaka (2000).
3. P.Dey. and M. Jamil., "Square Root of a Prime: A Monte Carlo Approximation", Proceedings of International Conference on Applied Mathematics & Mathematical Physics, ICAMMP 2002, Sylhet.
4. P. Dey. and M. A. Amin. "The (7,4,1)-Hamming Code and A Non Euclidean Geometry", Proceedings of the International Conference on Information and Knowledge Engineering, Vol II, IKE'03, Las Vegas (2003).
5. M. Asifuzzaman and P. Dey. "The Hadamard Connection of Projective Planes", Proceedings of Int. Conf. Appl. Math. & Math. Phy.-2005, Jan 4-7, SUST, Sylhet (2005)
6. Mahbubur Rahman Haque and Partha Pratim Dey, "A Note on Holomorphism in Certain Algebras", Proceedings of Int. Conf. Appl. Math. & Math. Phy.-2005", Jan 4-7, SUST, Sylhet (2005)
7. P.Dey and Manzia Jamil, "A Note on the Square Roots of  $-1$  in  $M_2(R)$ ", Proceedings of 5<sup>th</sup> Annual Hawaii International Conference on Statistics, Mathematics and Related Fields (2006).
8. P.Dey and Manzia Jamil, "On the Codes of a Finite Plane of 3rd Order", Proceedings of 5<sup>th</sup> Annual Hawaii International Conference on Statistics, Mathematics and Related Fields (2006)
9. P. Dey, A. R. Chowdhury, "On Nonexistence of a Two Error Correcting [7,3] Ternary Linear Code", Proceedings of the International Conference on Statistical Sciences (2008).
10. P. Dey, M. Asifuzzaman, "A Decomposition of the Code of Configuration of Cyclic Group of Order Four", Proceedings of the International Conference on Statistical Sciences (2008).
11. P. Dey, A. R. Chowdhury, "An Approximation of Square Roots of Positive Number", Proceedings of the International Conference on Statistical Sciences (2008).
12. P. Dey, M. Mia, "A Decomposition Theorem", Proceedings of the International Conference on Computational Chemistry (2008), Canary Islands, Spain
13. P. Dey, A. R. Chowdhury, "Further Results on the  $n^{\text{th}}$  Roots of a Positive Number", Proceedings of the 5<sup>th</sup> Asian Mathematical Conference, Malaysia (2009).

## **SELECTED JOURNAL PUBLICATIONS:**

1. P. Dey and J.L. Hayden, "On Symmetric Incidence Matrices of Projective Planes", Designs, Codes and Cryptography, Vol 6, Kluwer, Boston (1995).
2. P. Dey., "Multiplier Theorem Revisited", Nepali Mathematical Sciences Report. 20, no 1-2,1-7, Nepal (2002).
3. P. Dey., "A Geometry of Coding Theory", WSEAS Transactions on Computers, Issue 1, Volume 2 (January 2003).
4. P. Dey., "Many Faces of Hamming Code", WSEAS Transactions on Computers, Issue 1, Volume 2 (January 2003).
5. P. Dey., "On Relation between Gender and Aptitude in Mathematics: A Case Study", Digest of the Proceedings of the WSEAS Conferences (August-November, 2003)
6. P.Dey., " $n^{\text{th}}$  Root: A Monte Carlo Approximation", African Diaspora Journal of Mathematics, Vol.1, Number 1, Nova Science Publishers, New York, Inc (2004).
7. P. Dey., "A New Definition of Complex Derivative", Analysis and Applications, Allied Publishers Private Limited (2004).
8. P.Dey. "Exploring Dimension of Invariant Linear Codes through Generators and Centralizers", Archivum Mathematicum, Vol 41, No 1 (2005), Brno, Czech Republic.
9. P.Dey, SM Rayhan and MW Kazi, "Error Correction with Fano Plane Codes", The Computer Science and Engineering Review, Vol 2 (2006).
10. P. Dey and Kamrul Hassan, "Fixed Points in Group Invariant Subspaces", The Nepali Mathematical Sc. Report, Vol 26, No. 1 & 2 (2006).
11. P.Dey and M. Islam, "Generator and Parity Check Matrices of Third Order Planar Codes", Daffodil International University Journal of Science & Technology, Vol 2, Issue 1 (January 2007).
12. P.Dey, K. Fatima and M. Hossain, "A New Set of (7,3) Ternary Linear Codes", Asian Journal of Information Technology, Vol 6, No 3 (2007).
13. P.Dey., "A [9,3] Ternary Linear Code", Far East Journal of Mathematical Sciences, Vol 29, Issue 1 (2008).

14. P. Dey, M. Asifuzzaman, "A Note on the Code of Projective Plane of Order Four", Journal of Discrete Mathematical Sciences & Cryptography, Vol 11, No. 6 (2008).
15. P. Dey, Manzia Jamil, "On Complex Derivative and Complex Matrices", Journal of Interdisciplinary Mathematics, vol 11, No.2 (2008).
16. P. Dey, "A Tale of Two Theorems", Inspire 2.0, NSU Wireles Forum Annual Publication, Issue (2009).
17. P. Dey, M. Asifuzzaman, Kamrul Hassan, "From Toys to Tools of Communication", The Wireless Spectrum, Issue III (2011).
18. P. Dey, "An Approximation of Napier's Constant", Canadian Journal on Science and Engineering Mathematics", Vol 2, No 4 (2011)
19. P. Dey, "Codes from Cyclic Group of Order Four", ", Canadian Journal on Science and Engineering Mathematics", Vol 3, No 4 (2012)
20. P. Dey, Tanveer Talukder, Zubair Ahmed, "A couple of Error-Correcting Codes", International Journal of Management, IT and Engineering, Vol 2, Issue 10 (2012)
21. P. Dey, Afsher Mazumder, A.K.M. Toyarak Rian, "Two Ways of Approximation of Pi and its Square Root", International Journal of Management, IT and Engineering, Vol 2, Issue 11 (2012)
22. P. Dey, Rifat Simoom Chowdhury, "A Study of Population Dynamics and Migration", Journal of Interdisciplinary Mathematics", Vol 16, No 1 (2013)
23. P. Dey, "A Ternary BCH Code by Example", International Journal of Mathematics and Computer Research", Vol 2, Issue 1, pp 306-309 (2014)
24. P. Dey, M. Asifuzzaman, Kamrul Hassan, "Codes from the Cyclic Group of Order Three", Journal of Advanced Computing and Communication Technologies, Vol 2, Issue 2 (2014)
25. P. Dey, Farzana Karim Elora, A.K.M. Toyarak Rian, "On Quinary Hamming Code for  $r = 2$ ", International Journal of Computer and Information Technology, Vol 3, Issue 5, September (2014)
26. P. Dey, A.K.M. Toyarak Rian, Farzana Karim Elora, "An Investigation of Quaternary [5,3] Error Correcting Codes and their Implementation with Binary Devices", Journal of Informatics and Mathematical Sciences, Vol 7, No 1, pp 1-11 (2015)
27. P. Dey, A.K.M. Toyarak Rian, "A Study on Equivalence of 1-Error-Correcting [5,2] Quaternary Codes", Journal of Information & Optimization Sciences, Vol 36, No 5, pp 501-510 (2015)
28. P. Dey, A.K.M. Toyarak Rian, "A Note on [5,3] Error Correcting Codes over GF(7), IOSR Journal of Mathematics, Vol 11, Issue 4, pp 50-60 (2015)
29. Farzana Karim Elora, P. Dey, A.K.M. Toyarak Rian, "A Treat from Topology", IOSR Journal of Mathematics, Vol 11, Issue 6, pp 71-73 (2015)
30. P. Dey, A. K. Ghosh, "On Quinary Error-Correcting [6,4] Codes", Journal of Discrete Mathematical Sciences & Cryptography, in press with Taylor & Francis.

### **HISTORICAL NOTES:**

1. P. Dey., "The Last Three Hundred and Fifty Years of Fermat's Theorem", Riddhi (2005).
2. P. Dey., "The Author of Lilavati", Riddhi (2006).