

Curriculum Vitae

1. **Name** : Nilanjan Bondyopadhaya
2. **Sex**: Male
3. **Nationality**: Indian.
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5. **Address**:
 - (a) *Residential Address* : 26, K. C. Banerjee Road, P.O. Harinavi, P.S. Sonarpur, Kolkata, West Bengal, India, Pin-700148, Phone: +91-33-24775124 (R), +919433467365 (M).
 - (b) *Office Address*: Integrated Science Education and Research Centre, Siksha Bhavana, Visva-Bharati University, Santiniketan, West Bengal, India, Pin-731235.
6. **Present Position**: Assistant Professor, Integrated Science Education and Research Centre (ISERC), Siksha Bhavana, Visva-Bharati University.
7. **Education**:
 - (a) B.Sc. from Jadavpur University, Kolkata, India in 2002.
 - (b) M.Sc. from Jadavpur University, Kolkata, India in 2004.
 - (c) Post M.Sc. scholar at Saha Institute of Nuclear Physics, Kolkata, India in 2004-2005.
 - (d) Ph.D.(Science) from Saha Institute of Nuclear Physics -Jadavpur University, Kolkata, India on December 2010. Title of Thesis: *Studies on some quantum integrable spin chains with long-range interaction* .

8. **Research experience**

- (a) Senior Scientific Researcher in Bogoliubov Laboratory of Theoretical Physics, Joint Institute of Nuclear Research, Dubna, Russia from January 2015 to December 2015.
- (b) Senior Research Fellow at Saha Institute of Nuclear Physics, Kolkata, India from 2006 to 2009.
- (c) Junior Research Fellow at Saha Institute of Nuclear Physics, Kolkata, India from 2005 to 2006.

9. **Short-term visits**

- (a) International Center for Theoretical Physics, Trieste, Italy during 28th June - 28th July, 2014.

10. **Employment:**

- (a) Assistant Professor in A.B.N. Seal (Govt) College, Cooch Behar, West Bengal, India under West Bengal Education Service from 2009 to 2010.
- (b) Assistant Professor in Integrated Science Education and Research Centre, Siksha Bhavana, Visva-Bharati University, Santiniketan, India from 2010 onwards.

11. **Scholarships and Awards:**

- (a) National Scholarship awarded in 2002.
- (b) CSIR JRF - National Eligibility Test Scholar in 2003.
- (c) SLET (WBCSC) scholar in 2004.
- (d) A.P. Patro Memorial Award from Saha Institute of Nuclear Physics in 2005.

12. **Present Research Interests:**

- (a) Quantum Integrable spin chain with long-range interaction.
- (b) Non-equilibrium transport.
- (c) Majorana Fermions in topological superconductor.
- (d) Theoretical Quantum optics.
- (e) Spintronics

13. Publications:

- Published articles:
 - (a) Supersymmetric analogue of BC_N type rational integrable models with polarized spin reversal operators, P. Banerjee, B. Basu-Mallick, N. Bondyopadhaya, C. Datta, Nuclear Physics B 904 (2016) 297-326, arXiv:1511.05909.
 - (b) Partition functions of Polychronakos like spin chains associated with polarized spin reversal operators, Bireswar Basu-Mallick, Nilanjan Bondyopadhaya and Pratyay Banerjee, Nuclear Physics B 883 (2014) 501-528, arXiv:1402.2759.
 - (c) Statistics of scattered photons from a driven three-level emitter in a one-dimensional open space, Dibyendu Roy and Nilanjan Bondyopadhaya, Physical Review A 89, 043806 (2014), arXiv:1401.0833.
 - (d) Topologically trivial zero-bias conductance peak in semiconductor Majorana wires from boundary effects, Dibyendu Roy, Nilanjan Bondyopadhaya and Sumanta Tewari, Physical Review B 88, 020502(R) (2013), arXiv: 1303.1083.
 - (e) One-Dimensional Vertex Models Associated with a Class of Yangian Invariant Haldane-Shastry Like Spin Chains, Bireswar Basu-Mallick, Nilanjan Bondyopadhaya and Kazuhiro Hikami, SIGMA 6 091 (2010), arXiv:1008.5285.
 - (f) Spectral properties of supersymmetric Polychronakos spin chain associated with A_{N-1} root system. B. Basu-Mallick and Nilanjan Bondyopadhaya, Physics Letters A 373, 2831(2009), arXiv:0811.3110.
 - (g) Low energy properties of the $SU(m|n)$ supersymmetric Haldane-Shastry spin chain. B. Basu-Mallick, Nilanjan Bondyopadhaya and Diptiman Sen, Nuclear Physics B 795, 596 (2008), arXiv:0710.0452.
 - (h) Boson-fermion duality in $SU(m|n)$ supersymmetric Haldane-Shastry spin chain. B. Basu-Mallick, Nilanjan Bondyopadhaya., K. Hikami and Diptiman Sen Nuclear Physics B 782 276(2007), arXiv:hep-th/0703240.
 - (i) Exact partition function of $SU(m|n)$ supersymmetric Haldane-Shastry spin chain, B. Basu-Mallick, Nilanjan Bondyopadhaya, Nuclear Physics B 757 280(2006), arXiv:hep-th/0607191.

14. Oral/Poster presentation:

- (a) Oral presentation in The XVIIIth International Colloquium on Integrable Systems and Quantum Symmetries (ISQS-18) 2009 at Prague, Czech Republic.
- (b) Poster presentation in the Workshop on Integrability and its Breaking in Strongly Correlated and Disordered Systems 2011 at ICTP, Trieste, Italy.
- (c) Poster presentation in The School on Non-linear Dynamics, Dynamical Transitions and Instabilities in Classical and Quantum Systems 2014 at ICTP, Trieste, Italy.
- (d) Oral presentation in Brazil-JINR forum on Frontiers in Nuclear, Elementary Particle, and Condensed Matter Physics, 2015 at Joint Institute of Nuclear Research (JINR) Dubna, Russia.
- (e) Poster presented in the Conference on Long-Range Interacting Many-Body Systems:from Atomic to Astrophysical Scales 2016 at ICTP, Trieste, Italy .
- (f) Oral presentation in the tenth Conference on Nonlinear Systems and Dynamics (CNSD 2016) at IISER, Kolkata, India.

15. Programming Skills: Mathematica, Python, C++, Fortran.