

Budhaditya Chatterjee

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Personal information

- **Nationality:** Indian
- **Date of Birth:** February 03, 1983
- **Languages:** Bengali (mother tongue), English (Excellent), Hindi (Fluent), German (Elementary).

Professional Experience

- **2013-present:** Research Associate - Indian Association for the Cultivation of Sciences, Kolkata
- **2011-2012:** Postdoctoral researcher - Zentrum für Optische Quantentechnologien, University of Hamburg
Group: Peter Schmelcher

Education

- **2007-2011:** Ph.D - University of Heidelberg, Germany
Thesis: Tunneling dynamics of ultracold few-boson systems in double-well traps
Advisor: Prof. Dr. Lorenz S. Cederbaum
Prof. Dr. Peter Schmelcher
- **2006-2007:** Junior Research Fellow - Indian Institute of Technology, Kharagpur, India
- **2004-2006:** Master of Science (M.Sc.)- Indian Institute of Technology, Kharagpur, India.
- **2001-2004:** Bachelor of Science (B.Sc.) - Presidency College , University of Calcutta, India.

Scholarship

- **2011-2012:** Landesexzellenz-zinitiative Hamburg financed by the Science and Research Foundation Hamburg and supported by Joachim Herz Stiftung.
- **2007 - 2011:** International Max Planck Research School for Quantum Dynamics (I.M.P.R.S.-Q.D.) Fellowship
- **2006 - 2007:** Council for Scientific and Industrial Research (C.S.I.R), India, Junior Research Fellowship

Current Research Interest

- Ultracold atoms in traps - Few body and ab-initio perspective.
- Ab-initio quantum dynamics.
- Ultracold dipolar systems.
- Quantum many body physics.

Technical Skills

- **Computer and Programming:** C, C++, Python, Matlab, Mathematica.
- Experienced in using Multi-Configuration Time Dependent Hartree (MCTDH) Method.

Publications

- **Ultracold dipolar few- boson ensembles in a triple well trap,**
B. Chatterjee, I. Brouzos, L. Cao and P. Schmelcher
J. Phys. B: At. Mol. Opt. Phys. **46**, 085304 (2013).
- **The impact of spatial correlation on the tunneling dynamics of few-boson mixtures in a combined triple well and harmonic trap,**
L. Cao, I. Brouzos, B. Chatterjee, and P. Schmelcher
New J. Phys. **14**, 093011 (2012)
- **Few-boson tunneling dynamics of strongly correlated binary mixtures in a double well,**
B. Chatterjee, I. Brouzos, L. Cao and P. Schmelcher
Phys. Rev. A **85**, 013611 (2012)
- **Few-boson tunneling in a double well with spatially modulated interaction**
B. Chatterjee, I. Brouzos, S. Zoellner and P. Schmelcher
Phys. Rev. A **82**, 043619 (2010)
- **Pairing in disordered s-wave superconductors and the effect of their coupling,**
B. Chatterjee and A. Taraphder
Solid State Communication, vol. 148. page 582 (2008)

Conference Talk

- **Few-boson tunneling in a double well with spatially modulated interaction,** DPG Spring Meeting, Hanover 2010 (Germany)
- **Quantum dynamics of strongly interacting bosonic mixture,** DPG Spring Meeting, Dresden 2011 (Germany)

References

Prof. Dr. Peter Schmelcher

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