



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE __6566__

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at Dipartimento di _ Dipartimento di Fisica Aldo Pontremoli dell'Università degli Studi di Milano _____

Scientist- in - charge: _Prof Paris_Matteo_____

[Name and surname]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	BAGCHI
Name	SHROBONA

PRESENT OCCUPATION

Appointment	Structure
Post doc reseach fellow	Korea Institute of Science and Technology, Seoul, South Korea

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Bachelor of Science	University of Calcutta	2009
Specialization	Physics		
PhD	Theoretical Physics	Homi Bhabha National Institute, India	2017
Master	Master of Science in Physics	Homi Bhabha National Institute, India	2011
Degree of medical specialization	NA		
Degree of European specialization	NA		
Other	NA		



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of Association	City
15.06.2023.	American Journal of Physics and Applications	USA

FOREIGN LANGUAGES

Languages	level of knowledge
English	Read, Write, Speak fluently

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2006	Best Scientific poster award in Inter College Competition, Saha Institute of Nuclear Science, Kolkata, India
2009 -11	Junior Research Fellowship from Department of Atomic Energy, Govt of India
2011-16	Senior Research Fellowship, from Department of Atomic Energy, Govt of India
2016	Infosys Prize: For serving with distinction as a teaching assistant in physics in Harish Chandra Research Institute, India
2017-18	Post Doctoral research Fellowship, Center for Quantum Technology, National University of Singapore, Singapore
2018	Performance Bonus by Center for Quantum Technology, National University of Singapore, Singapore
2018-21	PBC (Planning and Budget Commission) fellowship for outstanding Postdoctoral Fellows from China and India, Tel Aviv University, Israel
2021-24	Post doctoral research fellowship in Korea Institute of Science and Technology, Seoul, South Korea
2023	Certificate of appreciation for becoming Qintrn Mentor of 2023 by QWorld

TRAINING OR RESEARCH ACTIVITY

Post doctoral research fellow, Center for Quantum Technologies, National university of Singapore, Singapore, from 9.1.2017 to 28.2.2018
Visiting Scientist , Institute of Physics, Bhubaneswar, India from 28.6.2018 to 10.09.2018
Visiting Scientist , S N Bose National Centre for Basic Sciences, Kolkata, India from 9.4,2018 to 8.5,2018
Post doc Research Fellow, Raymond and Beverly Sackler School of Physics and Astronomy, Tel Aviv University, Tel Aviv, Israel, from 1.10.2018 to 30.9.2021
Post doctoral Research Fellow ,Centre for Quantum Information, Korea Institute of Science and Technology, Seoul, Republic of Korea from 25.10. 2021 to present



PROJECT ACTIVITY

Year	Project
2018-2021	Time, weak Measurement and Corelation on quantum physics, funded by Planning and Budget Commission of Government of Israel
2023	Quantum state smoothing and Quantum Sensing, Mentor in in Qworld internship
2023	Reverse bound in Quantum Metrology, Mentor in in Qworld internship

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
February 2012	- Poster Presentation titled Generalized Geometric Measure for multiparty Mixed States,	International Workshop on Quantum Information at Harish-Chandra Research Institute, Allahabad, India
January 2013	Poster Presentation titled Remote state preparation in relativistic scenario,	International Conference on Quantum Information and Quantum Computing, at Indian Institute of Science, Bangalore, India.
August 2014	- Country Paper Presentation , representing India, titled Towards Gender Equity in Physics in India: Initiatives, Investigations and Questions,.	5th IUPAP International Conference on Women in Physics, at Laurier Wilfrid University, Waterloo, Canada
February 2015	Oral Presentation titled Monogamy, polygamy and other properties of Entanglement of purification	iYoung Quantum, at Harish-Chandra Research Institute, Allahabad, India.
Decemember 2015	Poster presentation titled Uncertainty relations for general unitary Operators,	International Conference on Quantum Foundations 2015, at National Institute of Technology, Patna, India
December 2015	Poster presentation titled Generalized Geometric Measure for multiparty Mixed states	Meeting on Quantum Information Processing and Applications, At Harish-Chandra Research Institute, Allahabad, India.



December 2017	Poster presentation titled Another algorithm for sampling random quantum States Scientific Advisory Board meeting, Center for Quantum Technologies,	a National University of Singapore
december 2017	Poster presentation titled Another algorithm for sampling random quantum States,	Nanyang Quantum 2017: Workshop on Quantum Resources and Correlations Beyond Entanglement at Nanyang Technological University, Singapore.
January 2019	Poster presentation titled Quantum Pigeonhole Paradox Time and Fundamentals .	Quantum Mechanics at Weizmann Institute, Israel
May 2019	- Poster presentation titled Quantum Pigeonhole Paradox Quantum 2019	University of Turin, Italy
September 2019	Poster presentation titled Quantum Pigeonhole Paradox at Summer School	Quantum paradoxes, John Bell Institute, Croatia
June 2021	IID and problem specific samples of quantum states from Wishart Distributions	Summer School on Quantum Information and Quantum Technology-2021, IISER Kolkata, India.
June 2022	Oral Presentation, titled IID and problem specific samples of quantum states from Wishart Distributions Quantum Science Days 2022,	Qworld online,
May 2023	Oral Presentation, titled Tighter and Stronger Quantum Speed Limits for general quantum states Quantum Science Days 2023,	Qworld online
May 2023	Oral Presentation, titled Remote quantum coherence via indefinite causal order Quantum Science Days 2023.	, QWorld, Online
September 2023	Poster Presentation, titled Tighter and Stronger Quantum Speed Limits for general quantum states Asian Quantum Information Science 2023,	Seoul, South Korea, Online.
December 2023	Invited talk, titled A review on the questions of spin and spin quantum correlations in the relativistic regime.	An online celebration. Reputed international online conference 4-8 December 2023



	The golden wedding of black holes and thermodynamics:.	
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PUBLICATIONS

Books
“On the question of spin and spin” in the book “ Quantum Entanglement in High Energy Physics” edited by Prof O K Baker, Yale Univ, USA, published by Intechopen on 24.04.2024
[title, place, publishing house, year ...]
[title, place, publishing house, year ...]

Articles in reviews
Shrobona Bagchi, Dimpri Thakuria, Arun Kumar Pati, Stronger quantum speed limit for mixed quantum state, Entropy, MDPI, 25(7), 1046(2023), doi .org/10.3390/e25071046
Gregory Reznik, Carlotta Versmold, Jan Dziewior, Florian Huber, Shrobona Bagchi, Harald Weinfurter, Justin Dressel, Lev Vaidman, Photons are lying about where they have been, again, Physics Letter A, Elsevier, 470, 128782(2023), doi.org/10.1016/j.Physleta.2023.128782
Jasleen Kaur, Shrobona Bagchi, Arun K Pati, Remote creation of quantum coherence via indefinite casual order, Quantum Information Processing, Springer, 22, 107(2023), doi.org/10.1007/s 11128-022-03708-1.
Shrobona Bagchi, Chandan Datta, Pankaj Agarwal, Inferred-variance uncertainty relations in the presence of quantum entanglement, Physical Review A, American Physical Society, 106, 022203(2022) , doi : 10.1103/PhysRevA.106.022203.
Yakir Aharonov, Shrobona Bagchi, Justin Dressel, Gregory Reznick, Michael Reidley, Lev Vaidman, Failed attempt to escape from quantum pigeon conundrum , Physics Letter A, Elsevier, 399, 127287 (2021), doi.org/10.1016/j.physleta.2021.127287
Gregory Reznick, Shrobona Bagchi, Justin Dressel, Lev Vaidman, Footprints of quantum pigeons, Physical Review Research, American Physical Society, 2, 023004 (2020). doi: 10.1103/PhysRevResearch.2.023004
Debasis Mondal, Shrobona Bagchi, Arun K Pati, Tighter uncertainty and reverse uncertainty relations, Physical Review A, American Physical Society, A 95, 052117 (2017), doi: 10.1103/PhysRevA.95.052117
Tamoghna Das, Sudipto Singho Roy, Shrobona Bagchi, Avijit Misra, Aditi Sen-De,Ujjwal Sen, Generalized Geometric Measure of Entanglement for Multiparty Mixed States, Physical Review A, American Physical Society, 94, 022336 (2016).doi: 10.1103/PhysRevA.94.022336
Shrobona Bagchi, Arun K Pati, Uncertainty relations for general unitary operators, Physical Review A, American Physical Society, 94, 042104 (2016). doi: 10.1103/PhysRevA.94.042104
Shrobona Bagchi, Arun K Pati, Monogamy, polygamy and other properties of entanglement of purification, Physical Review A, American Physical Society , 91, 042323 (2015), doi: 10.1103/PhysRevA.91.042323

Congress proceedings
[title, structure, place, year]
[title, structure, place, year]



[title, structure, place, year]

OTHER INFORMATION

Organized five international conferences on Quantum information, processing and applications at Harish Chandra Research Institute, Allahabad, India from 2011 to 2015.

Acted as question paper setter, invigilator and examiner in Talent Search examination, Physics, organized by Harish-Chandra Research Institute for secondary and higher secondary level schools in Allahabad.

Organized five international conferences on Quantum information, processing and applications at Nanyang Institute, Singapore in 2018

Volunteered as teacher in the educational program of under privilege rural children of Allahabad at Harish Chandra Research institute, Allahabad in 2012.

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: ___Seoul, South Korea___26.04,2024._____, _____