Name: Dr. Arunabha Saha

Designation: Assistant Professor

Branch: Physics

Educational Qualification (s):

Qualification(s)	Institute/University
B.Sc. Physics (Honours)	*MBB College*
M.Sc. Physics (Specialization: Electronics)	*Tripura Central University*
Ph. D. (Experimental Nuclear Physics)	*Variable Energy Cyclotron Centre (VECC), Department of Atomic Energy (DAE), Kolkata; Degree awarded by Homi Bhabha National Institute (HBNI), Mumbai*
Post-Doctorate	*IIT Bombay*

Others:- **UGC-JRF NET Qualified (AIR 196)**

Experience (Research + Teaching) in years: 4 years (approx.)

Academic: 3 years, Research: 1 year 2 months

Details:

Sl. No.	Organization	Position Held	Duration	
			From	To
1	*NIT Agartala*	*Lecturer (on contract)*	1st August 2011	31st May 2012
2	*IIT Bombay, Mumbai*	*Institute Post-doctoral fellow*	17th Dec 2018	13th Jan 2020
3	*ICFAI University Tripura*	*Assistant Professor*	20th Jan 2020	Till date

Other Information:

(a) SCI Journal Publication details : (Total: 13)

(1) Shape coexistence scenario in ^{150}Sm from a γ–γ fast timing measurement
*S. Basak, S. S. Alam, D. Kumar, **A. Saha** and T. Bhattacharjee*
Physical Review C 104, 024320 (2021).

(2) Decay spectroscopy of ^{117,118}Sn
*Sangeeta Das, Anik Adhikari, S. S. Alam, Sathi Sharma, Suman Aich, Arkabrata Gupta, Y. Sapkota, Ananya Das, **A. Saha**, S. K. Dey, Dibyadyuti Pramanik, Abhijit Bisoi, Indrani Ray, T. Bhattacharjee, C. C. Dey, S. Sarkar, M. Saha Sarkar;*
Nuclear Physics A 1006, 122079 (2021).

(3) Measurement of electric quadrupole moment in neutron rich ^{131,132}I;
*S. S. Alam, D. Banerjee, T. Bhattacharjee, P. Blaha, D. Kumar, **A. Saha**, M. Saha Sarkar,S. Sarkar, S. K. Das;*
European Physical Journal A 56, 269 (2020).

(4) β-Decay end point energy measurement in ^{150}Pm→^{150}Sm using β–γ coincidence
***A. Saha** , T. Bhattacharjee, D. Banerjee, Deepak Pandit, P. Das, Soumik Bhattacharya, R. Guin, S. K. Das, S. R. Banerjee*
European Physical Journal A 56, 189 (2020)

(5) Study of radioactivity built-up and decay with singles time-stamped data
*Sangeeta Das, Arkajyoti De, Balaram Dey, Sathi Sharma, Anik Adhikari, S. S. Alam, Arkabrata Gupta, Y. Sapkota, Ananya Das, **A. Saha**, Dibyadyuti Pramanik, T. Bhattacharjee, Abhijit Bisoi, S. Sarkar, M. Saha Sarkar*
Journal of Instrumentation 14, T09006 (2019).

(6) Spectroscopy of a tetrahedral doubly magic candidate nucleus $^{160}_{70}Yb_{90}$
***A. Saha**, T. Bhattacharjee, D. Curien, J. Dudek, I. Dedes, K. Mazurek, A. Gozdz, S. Tagami, Y. R. Shimizu, S. Rajbanshi, A. Bisoi, G. de. Angelis, Soumik Bhattacharya, S. Bhattacharyya, S. Biswas, A. Chakraborty, S. Das Gupta, B. Dey, A. Goswami, D. Mondal, D. Pandit, T. Roy, R. P. Singh, M. Saha Sarkar, S. Saha, and J. Sethi.*
Journal of Physic G: Nuclear & Particle Physics 46, 055102 (2019).

(7) Lifetimes and transition probabilities for the low-lying states in ^{131}I and ^{132}Xe
*S. S. Alam, T. Bhattacharjee, D. Banerjee, **A. Saha**, S. Das, M. Saha Sarkar and S. Sarkar*
Physical Review C 99, 014306 (2019).

(8) Yrast and non-yrast spectroscopy of ^{199}Tl using a-induced reactions
*Soumik Bhattacharya, S. Bhattacharyya, R. Banik, S. Das Gupta, G. Mukherjee, A. Dhal, S. S. Alam, Md. A. Asgar, T. Roy, **A. Saha**, S. Nandi, T. Bhattacharjee, A. Choudhury, Debasish Mondal, S. Mukhopadhyay, P. Mukhopadhyay, S. Pal, Deepak Pandit, I. Shaik, and S. R. Banerjee*
Physical Review C 98, 044311 (2018).

(9) Spectroscopy of low lying states in ^{150}Sm
***A. Saha**, T. Bhattacharjee, S. S. Alam, D. Banerjee, M. Saha Sarkar, S. Sarkar, J. B. Gupta, P. Das, Soumik Bhattacharya, Deepak Pandit, R. Guin, S. K. Das, S. R. Banerjee*

Nuclear Physics A 976, 1 (2018).

(10) **Excited negative parity bands in ^{160}Yb**

A. Saha, *T. Bhattacharjee, D. Curien, I. Dedes, K. Mazurek, S. R. Banerjee, S. Rajbanshi, A. Bisoi, G.de Angelis, Soumik Bhattacharya, S. Bhattacharyya, S. Biswas, A. Chakraborty, S. Das Gupta, B. Dey, A. Goswami, D. Mondal,D. Pandit, R. Palit, T. Roy, R. P. Singh, M. Saha Sarkar, S. Saha, J. Sethi*

Physica Scripta 93, 034001 (2018).

(11) VECC array for Nuclear fast Timing and angUlar corRElation studies (VENTURE)

S. S. Alam, T. Bhattacharjee, D. Banerjee, ***A. Saha****, Deepak Pandit, D. Mondal, S. Mukhopadhyay, Surajit Pal, P. Bhaskar, S. K. Das and S. R. Banerjee.*

Nuclear Instrumentation & Methods A 874, 103 (2017).

(12) Role of p-induced population of medium-mass (A ~ 150) neutron-rich nuclei.

D. Banerjee, ***A. Saha****, T. Bhattacharjee, R. Guin, S. K. Das, P. Das, Deepak Pandit, A. Mukherjee, A. Chowdhury, Soumik Bhattacharya, S. Das Gupta, S. Bhattacharyya, P. Mukhopadhyay, and S. R. Banerjee.*

Physical Review C 91, 024617 (2015).

(13) Measurement of β-decay end point energy with planar HPGe detector.

T. Bhattacharjee, Deepak Pandit, S.K. Das, A. Chowdhury, P. Das, D. Banerjee; ***A. Saha****, S. Mukhopadhyay, S. Pal, S.R. Banerjee.*

Nuclear Instrumentation & Methods A 767, 19 (2014).

(b) List of Conference Proceedings: (Total: 31)

(1) Evolution of collectivity in ^{160}Yb.

A. Saha*, T. Bhattacharjee, S. Rajbanshi, A. Bisoi, D. Curien, J. Dudek , P. Petkov, D. Banerjee,* S. R. Banerjee, Soumik Bhattacharya, S. Bhattacharyya, S. Biswas, A. Chakraborty, G. de Angelis, S. K. Das, S. Das Gupta, B. Dey, G. Duchene, A. Goswami, D. Mondal, D. Pandit, R. Palit, T. Roy, M. Saha Sarkar, S. Saha, R. P. Singh, J. Sethi.

Proceedings of the DAE Symp. on Nucl. Phys. 59, 268 (2014).

(2) Spectroscopy of low lying states of N = 88 ^{150}Sm.

A.Saha*, D. Banerjee, T. Bhattacharjee, Soumik Bhattacharya, A. Chowdhury, P. Das,S.Bhattacharyya, A. Mukherjee, S. K. Das and S. R. Banerjee.*

Proceedings of the DAE Symp. on Nucl. Phys. 59, 134 (2014).

(3) Search for isomeric state in odd-odd ^{150}Pm.

A.Saha*, D. Banerjee, T. Bhattacharjee, Deepak Pandit, S. S. Alam, P. Das, Soumik Bhattacharya, A. Choudhury, S. Bhattacharyya, A. Mukherjee, R. Guin, S. K. Das, S. R. Banerjee.*

DAE Symp. Nucl. Phys. 60, 98 (2015).

(4) Study of low-spin states of ^{197}Hg from decay spectroscopy.

Soumik Bhattacharya, S. Bhattacharyya, R. Banik, S. Dutta, G. Mukherjee, A.

*Choudhury, T. Bhattacharjee, **A. Saha**, D. Banerjee, R. Guin, P. Das.*
DAE Symp. Nucl. Phys. 60, 260 (2015).

(5) Fast Timing measurement in neutron rich ^{131,132}I.
*S.S. Alam, T. Bhattacharjee, D. Banerjee, **A.Saha**, P. Das, S.K. Das.*
DAE Symp. Nucl. Phys. 60, 270 (2015).

(6) Angular Correlation measurement around Z=64.
*N. Sensharma, S.S. Alam, D. Banerjee, T. Bhattacharjee, **A. Saha**, S.K. Das.*
DAE Symp. Nucl. Phys. 60, 272 (2015).

(7) Decay Spectroscopy of ^{134}I.
*R. Banik, S. Bhattacharyya, Soumik Bhattacharya, D. Banerjee, S.K. Das, G. Mukherjee, T. Bhattacharjee, A. Choudhury, P. Das, R. Guin, **A. Saha**.*
DAE Symp. Nucl. Phys. 60, 244 (2015).

(8) Angular Correlation and lifetime measurement in ^{150}Sm.
***A.Saha**, S. S. Alam, D. Banerjee, T. Bhattacharjee and S. R. Banerjee*;
DAE Symp. Nucl.Phys., 61, 300 (2016).

(9) Oblate band structure based on $\pi_{9/2}$ orbital in ^{199}T.
*Soumik Bhattacharya, S. Bhattacharyya, R. Banik, G. Mukherjee,S. Das Gupta, S.S. Alam, A. Dhal, Md. A. Asgar, T. Roy, **A. Saha**, T. Bhattacharjee, S. Mukhopadhyay, D. Pandit, D. Mondal, S. Pal and S. R. Banerjee*;
DAE Symp. Nucl. Phys. 61, 188 (2016).

(10) Study of nuclear structure in odd-odd ^{122,124}I.
*S. S. Alam, **A. Saha**, T. Bhattacharjee , D. Banerjee, Md. A. Asgar, R. Banik, S.Bhattacharyya, Soumik Bhattacharya, A. Dhal, D. Mondal, G. Mukherjee, S. Mukhopadhyay, S. Pal, D. Pandit, T. Roy, and S. R. Banerjee;*
DAE Symp. Nucl. Phys. 61, 316 (2016)

(11) Decay spectroscopy of fission fragments around ^{132}Sn
*S. S. Alam, D. Banerjee, **A. Saha**, T. Bhattacharjee and S. K. Das*;
DAE Symp. Nucl. Phys. 61, 318 (2016).

(12) Half-life and β-feeding measurements of ^{207}Po by γ-spectroscopy method
*A.Dhal, R. Ghosh, A. G. Nair, G. Mukherjee, Md. A. Asgar, T. Roy, T. K. Rana, T. K. Ghosh, K. Banerjee, S. Kundu, R. Pandey, Pratap Roy, S. Manna, A. Sen, A. Dey, J. K. Meena, J. K. Sahoo, A. K. Saha, R. Banik, Soumik Bhattacharya, **A. Saha**, S. S. Alam, D. Mondal, D. Pandit, S. Mukhopadhyay, S. Pal, T. Bhattacharjee, S. Bhattacharyya, C. Bhattacharya, and S. R. Banerjee;*
DAE Symp. Nucl. Phys. 61, 266 (2016).

(13) Spectroscopy of N = 90 ^{160}Yb.
***A. Saha**, T. Bhattacharjee, D. Banerjee, S. R. Banerjee, S. Rajbanshi, A. Bisoi, Soumik Bhattacharya, T. Roy, S. Das Gupta, A. Chakraborty, S. Bhattacharyya ,D. Mondal, B. Dey, D. Pandit, R. Palit, R. P. Singh, S. K. Das, M. Saha Sarkar, A. Goswami, S. K. Basu, S. Saha, S. Biswas, J. Sethi, D. Curien, J. Dudek,G. Duchene, G. De Angelis.*
Proceedings of the International Symp. on Nucl. Phys. 58, 180 (2013).

(14) Study of multi-quasiparticle band structures in ^{197}Tl using α beam
*G. Mukherjee, S. Nandi, H. Pai, T. Roy, Md.A. Asgar, A. Dhal, R. Banik, Soumik Bhattacharya, **A. Saha**, S. S. Alam, S. Bhattacharyya, C. Bhattacharya, Pratap Roy, T.K. Ghosh , S. Kundu, K.Banerjee, T.K. Rana, R. Pandey, S. Manna, A. Sen, S. Pal, S.*

Mukhopadhyay, D. Pandit, D. Mondal, T. Bhattacharjee, A. Dey, J.K. Meena, A.K. Saha, J.K. Sahoo, R. Mandal Saha, A. Choudhury, and S.R. Banerjee;
DAE Symp. Nucl. Phys. 61, 270 (2016).

(15) Lifetime measurement in neutron rich nuclei around ^{132}Sn

*S. S. Alam, D. Banerjee, **A. Saha** and T. Bhattacharjee;*
Proceedings of the DAE Symp. Nucl.Phys. 62, 208 (2017).

(16) Determination of Fission Product Yield for Lifetime and Quadrupole Moment Measurement

*D. Banerjee, S. S. Alam, Sk Wasim Raja, **A. Saha**, T. Bhattacharjee;*
Proceedings of the DAE Symp. Nucl. Phys. 62, 420 (2017).

(17) High spin structure and neutron alignments in ^{197}Tl

*S. Nandi, G. Mukherjee, H. Pai, T. Roy, Md. A. Asgar, A. Dhal, R. Banik, Soumik Bhattacharya, **A. Saha**, S. S. Alam, S. Bhattacharyya, C. Bhattacharya, Pratap Roy, T.K. Ghosh, S. Kundu, K. Banerjee, T.K. Rana, R. Pandey, S. Manna, A. Sen, S. Pal, S. Mukhopadhyay, D. Pandit, D. Mondal, T. Bhattacharjee, A. Dey, J.K. Meena, A.K. Saha, J.K. Sahoo, R. Mandal Saha, A. Choudhury, and S.R. Banerjee*
Proceedings of the DAE Symp. Nucl. Phys. 62, 80 (2017).

(18) Isomers in ^{117,118}Sn and role of neutron $1h_{11/2}$ orbit

*Sangeeta Das, Sathi Sharma, S. S. Alam, Arkabrata Gupta, Anik Adhikari, Ananya Das, **A. Saha**, S. K. Dey, Dibyadyuti Pramanik, Abhijit Bisoi, T. Bhattacharjee, C. C. Dey, S. Sarkar, M. Saha Sarkar*
Proceedings of the DAE Symp. Nucl. Phys. 62 (2017) 84.

(19) Decay spectroscopy of ^{118m}Sb

*Sathi Sharma, Sangeeta Das, S. S. Alam, Arkabrata Gupta, Anik Adhikari, Ananya Das, **A. Saha**, Dibyadyuti Pramanik, Abhijit Bisoi, Indrani Ray, T. Bhattacharjee, S. Sarkar, M. Saha Sarkar*
Proceedings of the DAE Symp. Nucl. Phys. 62, 200 (2017).

(20) Deformed structure based on $vi_{13/2}$ orbital in ^{199}Hg

*Soumik Bhattacharya, S. Bhattacharyya, R. Banik, S. Das Gupta, A. Dhal, G. Mukherjee, S. S. Alam, Md. A. Asgar, T. Roy, T. Bhattacharjee, **A. Saha**, S. Mukhopadhyay, Debasish Mondal, Deepak Pandit, Surajit Pal and S. R. Banerjee*
Proceedings of the DAE Symp. Nucl. Phys. 62, 118 (2017).

(21) Lifetime measurement of $3/2_1^+$ state of ^{117}Sn

*Sangeeta Das, Suman Aich, A. Adhikari, S.S. Alam, Sathi Sharma, B. Dey, Arkabrata Gupta, Y. Sapkota, A. Das, **A. Saha**, S. K. Dey, Dibyadyuti Pramanik, D. Banerjee, T. Bhattacharjee, C.C. Dey, Abhijit Bisoi, S. Sarkar, and M. Saha Sarkar*
Proceedings of the DAE Symp. Nucl. Phys. 63, 270 (2018).

(22) Lifetime measurement of low lying states of ^{27}Si

*Sathi Sharma, Sangeeta Das, Arkajyoti De, Rashika Gupta, A. Gupta, A. Adhikari, A. Das, Y. Sapkota, **A. Saha**, S. S. Alam, S. Bhattacharya, R. Banik, S. Nandi, S. Das, S. Samanta, S. Chatterjee, S. Bhattacharyya, B. Dey, D. Pramanik, A. Bisoi, T. Bhattacharjee, M. Nandy, S. Sarkar, and M. Saha Sarkar*
Proceedings of the DAE Symp. Nucl. Phys. 63, 320 (2018).

(23) Spectroscopy of ^{160,161}Ho

A. Adhikari, D. Pramanik, S. Das, Arkabrata Gupta, Y. Sapkota, Ananya Das,

S. Sharma, A. De, ***A. Saha****, S.S. Alam, S. Das, S. Samanta, S. Chatterjee, S. Bhattacharya, R. Banik, S. Nandi,*R. Raut, S.S. Ghugre, S. Bhattacharyya, G. Mukherjee, T. Bhattacharjee, A. Bisoi, M. SahaSarkar and S. Sarkar
Proceedings of the DAE Symp. Nucl. Phys. 63, 332 (2018).

(24) Life-time Measurement of levels in $^{160\text{-}162}$Dy nuclei

A.Adhikari, S. Das, S.S. Alam, D. Pramanik, S. Sharma, Y. Sapkota, Arkabrata Gupta,Ananya Das, ***A. Saha****, D. Banerjee, T. Bhattacharjee, A. Bisoi, M. Saha Sarkar, and S. Sarkar* **Proceedings of the DAE Symp. Nucl. Phys. 63, 338 (2018).**

(25) Study of nuclear structure in ^{125}I

S. S. Alam, D. Banerjee, T. Bhattacharjee, ***A. Saha****, S. W. Raja, S. Das, A. Adhikari, A. De, A. Gupta, A. Das, Y. Sapkota, S. Sharma, S. Dey Chaudhuri, D. Pramanik, A. Bisoi, M. Saha Sarkar and S. Sarkar*
Proceedings of the DAE Symp. Nucl. Phys. 63, 356 (2018).

(26) Singles time stamped data in In-beam spectroscopy

Sangeeta Das, Arkajyoti De, B. Dey, Sathi Sharma, A. Adhikari, S.S. Alam, Arkabrata Gupta, Y. Sapkota, A. Das, ***A. Saha****, Dibyadyuti Pramanik, D. Banerjee, T. Bhattacharjee, Abhijit Bisoi, S. Sarkar, and M. Saha Sarkar*
Proceedings of the DAE Symp. Nucl. Phys. 63, 1144 (2018).

(27) VECC-INGA: An exploration of nuclear structure with light ions

Soumik Bhattacharya, R. Banik, S. Nandi, Sajad Ali, S. Chatterjee, S. Das, S. Samanta, K. Basu, A. Choudhury, A. Adhikari, S. S. Alam, Shabir Dar, B. Das, Sangeeta Das, A. Dhal, A. Mondal, K.Mondal, P. Mukhopadhyay, H. Pai, P. Ray, ***A. Saha****, I. Shaik, C. Bhattacharya, G. Mukherjee, R. Raut, S. S.Ghugre, A. Goswami, S. Bhattacharyya*
Proceedings of the DAE Symp. Nucl. Phys. 63, 1156 (2018).

(28) Study of Nuclear Structure around N=90

A.Saha *(Thesis Presentation)*
Proceedings of the DAE Symp. Nucl. Phys. 63, 1230 (2018).

(29) Lifetime measurement of ^{130}Cs in picoseconds

A.Saha*, Pragya Das, U. Lamani, and R. Palit*
Proceedings of the DAE Symp. Nucl. Phys. 64, 202 (2019).

(30) Lifetime measurement in N=88 Sm using VENTURE array

Shefali Basak, S. S. Alam, D. Kumar, ***A. Saha****, D. Banerjee, T. Bhattacharjee*
Proceedings of the DAE Symp. Nucl. Phys. 64, 282 (2019).

(31) Near-yrast exotic structure in ^{199}Hg

Soumik Bhattacharya, S. Bhattacharyya, S. Das Gupta, R. Banik, G. Mukherjee, A. Dhal, S. Nandi, Md. A. Asgar, T. Roy, R. Raut, S. S. Ghugre, S. K. Das, S. Chatterjee, S. Samanta, Shabir Dar, A. Goswami, Sajad Ali, S. Mukhopadhyay, Debasish Mondal, S. S. Alam, T. Bhattacharjee, ***A.Saha****, Deepak Pandit, Surajit Pal, S. R. Banerjee, S. Rajbanshi*
Proceedings of the DAE Symp. Nucl. Phys. 64, 276 (2019).

(12) Details of Seminar/Workshop/Conference attended.

(i)International:

(1) Delivered an **Invited Oral Presentation** in a workshop entitled as "Shapes and Symmetries in Nuclei: from Experiment to Theory (SSNET16)" held at **CNRS campus of Gif sur Yvette, France on Nov., 2016.**

(2) Delivered an **Invited Oral Presentation** on "Study of Nuclear Structure around N (neutron no.)=90" at **Legnaro National Laboratory (LNL), Italy on Nov., 2016.**

(3) Presented a Poster in International DAE Symposium 2013 held at **Bhabha Atomic Research Centre (BARC), Mumbai, India.**

(4) Presented "PhD Thesis" in International DAE Symposium 2018 held at **Bhabha Atomic Research Centre (BARC), Mumbai, India.**

(ii)National:

(1) Attended "School on Nuclear Structure Physics"; April 21-26, 2014 at **Inter University Accelerator Centre (IUAC), New Delhi.**

(2) Attended a summer school on "Nuclear Fission and Related Phenomena"; May 13-23, 2014 organized by **Variable Energy Cyclotron Centre (VECC), Kolkata** on the occasion of 75 years of discovery of Nuclear Fission.

(3) Attended DST-SERC school on "Nuclear Structure at High Angular Momentum and Isospin"; October 5-25, 2014 organized by **TIFR, Mumbai.**

(4) Attended 59th DAE-BRNS Symposium on Nuclear Physics, 8-12 December 2014 held at **Banaras Hindu University (BHU), Varanasi, U.P.**

(5) Attended "Frontiers in Gamma Ray Spectroscopy (FIG15)"; February 18-20, 2015 at **Variable Energy Cyclotron Centre (VECC), Kolkata**.

(6) Attended 61th DAE-BRNS Symposium on Nuclear Physics, 7-11 December 2015 held at **Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam, Andhra Pradesh.**

(7) Attended SERC School on "Modern Microscopic Approaches in Nuclear Physics"; May 17-June 6, 2016 organized by Department of Physics, **University of Kashmir, Srinagar, Jammu & Kashmir, India**

(8) Attended 62stDAE-BRNS Symposium on Nuclear Physics, 5-9 December 2016 held at **Saha Institute of Nuclear Physics (SINP), Kolkata.**

(9) Attended "Frontiers in Gamma Ray Spectroscopy (FIG18)"; March 12-14, 2018 at **TIFR,Mumbai.**

(10) Attended 64th DAE-BRNS Symposium on Nuclear Physics, 23-27 December 2019 held at **Lucknow University, Lucknow, U.P.**