

Name: Dr. Dipayan Chattopadhyay

Designation: Assistant Professor

Branch: Physics



Educational Qualification(s):

Qualification(s)	University
B.Sc in Physics(Honours)	West Bengal State University
M.Sc in Physics	West Bengal State University
Ph.D in Physics	Homi Bhabha National Institute (Bhabha Atomic Research Centre)

Experience in years:

Academic Details:

Sl. No.	Organization	Position Held	Duration	
			From	To
1	Saha Institute of Nuclear Physics, Kolkata, India	Post doctoral Research Associate	15/02/2019	24/12/2020
2	Tata Institute of Fundamental Research, Mumbai, India	Post doctoral Research Associate	04/01/2021	06/12/2021
3	Indiana University, Bloomington, Indiana, The United States of America	Post doctoral Research Associate	09/12/2021	01/07/2022

Other Information:

a) Publication details.

- (1) “Direct and resonant breakup of radioactive ${}^7\text{Be}$ nuclei produced in the ${}^{112}\text{Sn}({}^6\text{Li}, {}^7\text{Be})$ reaction”, **D. Chattopadhyay**, S. Santra, A. Pal, A. Kundu, K. Ramachandran, R. Tripathi, T. N. Nag, and S. Kailas, *Phys. Rev. C* 102, 021601(R), 2020.
- (2) “Role of cluster structure in the breakup of ${}^7\text{Li}$ ”, **D. Chattopadhyay**, S. Santra, A. Pal, A. Kundu, K. Ramachandran, R. Tripathi, B. J. Roy, T. N. Nag, Y. Sawant, B. K. Nayak, A. Saxena, and S. Kailas, *Phys. Rev. C*, 97, 051601(R), 2018.
- (3) “Resonant, direct, and transfer breakup of ${}^6\text{Li}$ by ${}^{112}\text{Sn}$ ”, **D. Chattopadhyay**, S. Santra, A. Pal, A. Kundu, K. Ramachandran, R. Tripathi, D. Sarkar, S. Sodaye, B. K. Nayak, A. Saxena, and S. Kailas, *Phys. Rev. C*, 94, 061602(R), 2016.
- (4) “Resonant breakup of ${}^8\text{Be}$ in ${}^{112}\text{Sn}({}^7\text{Li}, {}^8\text{Be}) \rightarrow 2\alpha$ reaction”, **D. Chattopadhyay**, S. Santra, A. Pal, A. Kundu, K. Ramachandran, R. Tripathi, B. J. Roy, Y. Sawant, B. K. Nayak, A. Saxena, and S. Kailas, *Phys. Rev. C*, 98, 014609, 2018.
- (5) “Reduction of the effect of internal activity in LaCl_3 :Cescintillator”, **D. Chattopadhyay**, Sathi Sharma, M. Saha Sarkar, *JINST* 16, P06025, 2021.
- (6) “Effect of projectile breakup on fission-fragment mass distributions in the ${}^{6,7}\text{Li} + {}^{238}\text{U}$ reactions”, S. Santra, A. Pal, P. K. Rath, B. K. Nayak, N. L. Singh, **D. Chattopadhyay**, B. R. Behera, Variderajit Singh, A. Jhingan, P. Sugathan, K. S. Golda, S. Sodaye, S. Appannababu, E. Prasad and S. Kailas, *Phys. Rev. C* 90, 064620, 2014.

- (7) “Determination of $^{238}\text{Pu}(n, f)$ and $^{236}\text{Np}(n, f)$ cross sections using surrogate reactions”, A. Pal, S. Santra, B. K. Nayak, K. Mahata, V. V. Desai, **D. Chattopadhyay** and R. Tripathi, *Phys. Rev. C* 91, 054618, 2015.
- (8) “Probing systematic model dependence of complete fusion for reactions with weakly bound projectiles $^{6,7}\text{Li}$ ”, A. Kundu, S. Santra, A. Pal, **D. Chattopadhyay**, B.K. Nayak, A. Saxena and S. Kailas, *Phys. Rev. C* 94, 014603, 2016.
- (9) “Elastic, inelastic, and 1-nucleon transfer channels in the $^7\text{Li} + ^{120}\text{Sn}$ system”, A. Kundu, S. Santra, A. Pal, **D. Chattopadhyay**, R. Tripathi, B. J. Roy, T. N. Nag, B. K. Nayak, A. Saxena, and S. Kailas, *Phys. Rev. C* 95, 034615, 2017.
- (10) “Projectile-breakup-induced fission-fragment angular distributions in the $^6\text{Li} + ^{232}\text{Th}$ reaction”, A. Pal, S. Santra, **D. Chattopadhyay**, A. Kundu, K. Ramachandran, R. Tripathi, B. J. Roy, T. N. Nag, Y. Sawant, D. Sarkar, B. K. Nayak, A. Saxena, and S. Kailas, *Phys. Rev. C* 96, 024603, 2017.
- (11) “Deep-inelastic multi-nucleon transfer processes in the $^{16}\text{O} + ^{27}\text{Al}$ reaction”, B.J. Roy, Y. Sawant, P. Patwari, S. Santra, A. Pal, A. Kundu, **D. Chattopadhyay**, V.Jha, S.K. Pandit, V.V. Parkar, K. Ramachandran, K. Mahata, B.K. Nayak, A. Saxena, S. Kailas, T.N. Nag, R.N. Sahoo, P.P.Singh and K.Sekizawa, *Phys. Rev. C* 97, 034603, 2018.
- (12) “Mass distributions of fission fragments from nuclei populated by multi-nucleon transfer or incomplete fusion

channels in ${}^6,7\text{Li} + {}^{238}\text{U}$ reactions”, A. Pal, S. Santra, **D. Chattopadhyay**, A. Kundu, A. Jhingan, P. Sugathan, N. Saneesh, MohitKumar, N. L. Singh, A. Yadav, C. Yadav, R. Dubey, K. Kapoor, Kavita Rani, HoneyArora, Visakh A. C., Devinder Kaur, B. K. Nayak, A. Saxena, S. Kailas, and K. - H.Schmidt, *Phys. Rev. C* 98, 031601(R), 2018.

(13) “Measurement of incomplete fusion cross-sections in ${}^6,7\text{Li}+{}^{238}\text{U}$ reactions”, A. Pal, S. Santra, **D. Chattopadhyay**, A. Kundu, A. Jhingan, P. Sugathan, B. K.Nayak, A. Saxena, and S. Kailas, *Phys. Rev. C* 99, 024620, 2019.

(14) “Low lying quadrupole and octupole collective excitations in the ${}^{112,116,118,120,122,124}\text{Sn}$ isotopes”, A. Kundu, S. Santra, A. Pal, **D. Chattopadhyay**, R.Tripathi, B. J. Roy, T. N. Nag, B. K. Nayak, A. Saxena, and S. Kailas, *Phys. Rev. C* 99, 034609, 2019.

(15) “Measurement of the 2_1^+ level lifetime in ${}^{120}\text{Sn}$ by the Doppler shift attenuation method: Evidence of enhanced collectivity”, A. Kundu, S. Santra, A. Pal, **D. Chattopadhyay**, R. Raut, R. Palit, Md. S. R. Laskar, F. S. Babra, C. S. Palshetkar, B. K. Nayak, and S. Kailas, *Phys. Rev. C* 100, 034327 (2019).

(16)“Determination of ${}^{59}\text{Ni}$ (n, xp) reaction cross sections using surrogate reactions”, Jyoti Pandey, Bhawna Pandey, A. Pal, S. V. Suryanarayana, S. Santra, B. K. Nayak, E. T. Mirgule, AlokSaxena, **D. Chattopadhyay**, A. Kundu, V. V. Desai, A. Parihari, G. Mohanto, D. Sarkar, P. C. Rout, B. Srinivasan, K. Mahata, B. J. Roy, S. De, and H. M. Agrawal, *Phys. Rev. C* 99, 014611 (2019).

- (17) “Kinetic energy spectra and angular distributions of projectile-like fragments in $^{12,13}\text{C}+^{93}\text{Nb}$ reactions”, T. N. Nag, R. Tripathi, S. Sodaye, K. Sudarshan, S. Santra, K. Ramachandran, A. Kundu, **D. Chattopadhyay**, A. Pal, and P. K. Pujari, *Phys. Rev. C* 102, 024610 (2020).
- (18) “Large back-angle quasi-elastic scattering for $^7\text{Li}+^{159}\text{Tb}$ ”, Piyasi Biswas, A. Mukherjee, **D. Chattopadhyay**, SaikatBhattacharjee, M. K. Pradhan, Md. Moin Shaikh, Subinit Roy, A. Goswami, P. Basu, S. Santra, S. K. Pandit, K. Mahata, and A. Shrivastava, *Phys. Rev. C* 103, 014606 (2021).
- (19) “Fission fragment mass distribution in the $^{32}\text{S} + ^{144}\text{Sm}$ reaction”, T.N.Nag, R.Tripathi, S.Patra, A.Mhatre, S.Santra, P.C.Rout, A.Kundu, **D.Chattopadhyay**, A.Pal, P.K.Pujari, *Phys. Rev. C* 103, 034612 (2021).
- (20) “Quasielastic backscattering and barrier distribution for the weakly bound projectile ^6Li on ^{159}Tb ”, Piyasi Biswas, A. Mukherjee, SaikatBhattacharjee, **D. Chattopadhyay**, Subinit Roy, S. Santra, S. K. Pandit, K. Ramachandran, K. Mahata, and A. Shrivastava, *Phys. Rev. C* 104, 034620 (2021).
- (21) “Fusion of $^{16}\text{O}+^{165}\text{Ho}$ at deep sub-barrier energies”, SaikatBhattacharjee, A. Mukherjee, Ashish Gupta, RajkumarSantra, **D. Chattopadhyay**, N. Deshmukh, SangeetaDhuri, Shilpi Gupta, V. V. Parkar, S. K. Pandit, K. Ramachandran, K. Mahata, A. Shrivastava, Rebecca Pachuau, and S. Rathi, *Phys. Rev. C* 104, 054607 (2021).
- (22) “Measurement of mass and total kinetic energy distribution of fission fragments using newly developed compact MWPC detectors”, A. Pal, S. Santra, A. Kundu, **D.**

Chattopadhyay, A. Jhingan, B. K. Nayak and S. Prafulla
[JINST 15, P02008 \(2020\)](#).

b) Details of Seminar/Workshop/Conference.

- (1) DAE National symposium in Nuclear Physics, 2014.
- (2) DAE National symposium in Nuclear Physics, 2015.
- (3) DAE National symposium in Nuclear Physics, 2016.
- (4) DAE National symposium in Nuclear Physics, 2017.
- (5) DAE International symposium in Nuclear Physics, 2018.
- (6) DAE National symposium in Nuclear Physics, 2019.
- (7) DAE National symposium in Nuclear Physics, 2021.
- (8) NN International Conference, Saitama, Japan, 2018.