Name of Faculty	Dr. Neelima Agarwal	
Designation	Assistant Professor	
Nature of Job/Appointment	Regular	
Date of Joining	21-11-16	
E-mail	neelimaagarwal_physics@cbit.ac.in	
Education Qualifications	**Name of the Degree**	**Class**
Ph. D	Ph.D in Theoretical High Energy Physics, Univ. of Allahabad.	Awarded
PG	M.Sc Physics, IIT Delhi.	8.07 CGPA
UG	B.Sc, CCS Univ., Meerut.	79.4 %
Others	GATE	**91.2%**
	CSIR SRF,JRF, NET	Qualified
	JEST	Qualified

Work Experience

Teaching	6 Years
Research	7years + Ph.D (5 years)
Industry	-
Others	-

Area of Specialization	Theoretical High Energy Physics (QCD)
Professional Memberships	1. Young Associate of Regional Center for Accelerator based Particle Physics (RECAPP) 2008, HRI, Allahabad, India. 2. Lifetime membership of Indian Association of Physics Teachers (IAPT)
Responsibilities held at Institution Level	Women development cell member
Responsibilities held at Department Level	1. Department Library Incharge- 2019-20 2. Newsletter incharge 2020-21 3. ISO Incharge 2020-21 4. Research Coordinator of Physics from July 2019- till date. 5. Department Web Branding Committee coordinator -July 2021- till date
Research Guidance	-
Awards/ Scholarships Received	1. B1 Level German language certification, 2013, Germany. 2. CSIR-UGC Senior Research Fellowship (SRF), 2008, India. 3. National Eligibility Test for Lectureship (NET), 2005, India. 4. GATE (Graduate Aptitude Test in Engineering) with 91.87 Percentile, 2004, India. 5. JEST (Joint Entrance Screening Test for Ph.D program in Physics), 2003, India. 6. Gold Medal in B.Sc, CCS University Meerut, 2001, India.
Courses Handled at Under Graduate / Post Graduate Level.	1. Engineering Physics 2. Applied Physics 3. Introduction to Mechanics and Electromagnetic theory

	4. Optics and Semiconductor Physics 5. Physics
No. of Papers Published	National Journals – 02 International Journals – 09 National Conference – 03 International Conference – 07
Projects Carried out	-
Patents	-
Technology Transfer	Collaborations with 1. IIT Hyderabad 2. University of Turin, Italy 3. Nikhef, University of Amsterdam
Invited Speaker (Few Important/Prominent)	1. Invited lectures in GIAN at IITH during Dec 4th - 13th 2018. 2. Live sessions on "Mathematica" in NPTEL as a part of course on "Introduction to Classical Mechanics" during Sept-Dec 2020 and July-Oct 2021.
Details of the workshops/ STTP/ Seminars organised.	1. **Co-coordinator**, Two day International-e-Conference on "Materials Processing & Characterization (ICMP&C- 2020)" organized by Department of Physics, CBIT, Gandipet, Hyderabad, Telangana during 18th-19th Sept 2020. 2. **Member,** One week on line FDP on "Student Induction &Universal Human Values" organized by Department of Physics, CBIT during 26th-30th Aug 2020. 3. **Member,** of One week FDP on "Engineering Physics and Materials Science: organized by Department of Physics, CBIT, Gandipet, Hyderabad during 3rd-7th Aug 2020. 4. **Co-ordinator**, Guest Lecture by Prof. Eric Leanen, University of Amsterdam on 'Higgs Physics and its Prospects' on 17th Feb 2020 at CBIT. 5. **Co-coordinator,** a four day international conference on 'Precision QCD@LHC' from 28th- 31st Jan 2020 at IIT Hyderabad. 6. **Co-ordinator**, a one day Workshop on 'Recent trends in Material Science and its applications in Engineering' on 20th Nov 2019 at CBIT. 7. **Co-ordinator**, 12 Lectures on 'Human Values and Ethics' in Induction Programme in July - Aug 2019 at CBIT. 8. **Co-ordinator**, one day seminar on 'Physics and its Applications in Engineering' on 13th March 2019 at CBIT. 9. **Co-ordinator**, Colloquium on 'Anthropology of Science, Research and Media' on 7th March 2019 at CBIT.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.
Other Trainings attended.

1. 2 day National Conference on Recent advances in Physics for interdisciplinary development RAPID 2k21 on 29th-30th Sept 2021 2021organised by SJVP college.
2. 2 day e-symposium on 3rd-4th Sept 2021organised by VNRVJIET.
3. 2 day international conference on " 9th-10th August 2021 organised by JVM degree college in collaboration with ACT.
4. one week FDP on 9-13th August 2021organised by MGIT.
5. **Amplitudes 2021** on 16th - Aug 2021
6. 2 Day international conference on ICEEAMSF on 15th -16th July 2021 organised by Kongu engineering college, Tamil Naidu.
7. One week FDP on " NEP" on 5th- 11th July 2021sponsored by UGC.
8. one week FDP on " Enriching Learning practices in dynamic practices" on 5th - 9th July 2021 organised by kongu Science and arts college, Erode.
9. one week Executive FDP on 29th-30th june 2021organised by Nehru Science College.
10. one week FDP on 14-21st June 2021organised by Christian eminent college, Indore.
11. one week workshop on Essential statistics and SPSS on 24th-28th May 2021 organised by VPM's KG college, Thane.
12. one week Education summit on 5th-12th May 2021 organised by Oriental college, Bhopal.
13. 4- weeks orientation programme on 11th Feb - 13th March 2021 organised by University of Delhi.
14. XXIV DAE-BRNS High Energy Physics Symposium on 14-18th Dec 2020
15. one week FDP on student induction programme on 26th-30th August 2020.
16. Bodhi and safe tree: A hands on workshop on online teaching on 20th June 2020 organised by IIT Bombay.
17. An online Workshop on 'Social Responsibility and Community Engagement' on 17th June 2020, CBIT.
18. National level one week online training on "Sci Lab – Computational Software" organized by Government Degree College for Women (A), 8th -13th June 2020.
19. A one week FDP on 'Outcome Based Education' organized by CBIT from 28th May-2nd June 2020.
20. One week Webinar Lecture Series on "Modern Physics and Materials Science" held from 26th-30th May 2020 organized by Holkar institute, Indore.
21. A 4-week course on 'Blended Learning and Practice' organized by Athabasca University, Canada, from 19th April- 17th May 2020.
22. 'Effective and Efficient Online Teaching in the Age of Corona: A Hands-On Workshop on Saturday, 16th May 2020, organized by IIT Bombay.
23. Attended Faculty Programme on NBA on 5th May 2020.
24. Guest Lecture by Prof. Eric Leanen, University of Amsterdam on 'Higgs Physics and its

Prospects' on 17th Feb 2020 at CBIT.

25. A 4-week course on 'Effective engineering by NPTEL from Feb 2020.
26. A four day international conference on 'Precision QCD@LHC' from 28th Jan - 31st Jan 2020 at IIT Hyderabad.
27. A one day Workshop on 'Recent trends in Material Science and its applications in Engineering' on 20th Nov 2019 at CBIT.
28. A 16-week Annual Refresher course (ARPIT) on 'Quantum Physics and its applications' by NPTEL from Sept - Dec 2019.
29. 12 Lectures on 'Human Values and Ethics' in Induction Programme in July - Aug 2019 at CBIT.
30. One day seminar on 'Physics and its Applications in Engineering' on 13th March 2019 at CBIT.
31. Colloquium on 'Anthropology of Science, Research and Media' on 7th March 2019 at CBIT.
32. GIAN lectures at IITH during Dec 4th-13th 2018.
33. Faculty Development Programme on ' Transforming into better performers' Nov 27 - Dec 01, 2017, CBIT, Hyderabad, India.

Details of Journal Publications/ Conferences (National and International)

International/ National Conferences:

1. Computational Thinking: A tool for Active learning in Physics Education, Neelima Agarwal (CBIT), in NVTTL 2021 organized by Department of education , Invertis university, Bareilly on 6th-7th August 2021(Oral)

2. "Online teaching integrated with computational thinking in Physics education" in ICIASEH 2021 organized by SIRTE, Bhopal on 29th-30th July 2021(Oral)

3. Online Teaching integrated with Learner Centric Moocs Model in Physics Education, Neelima Agarwal (CBIT), Conference Proceedings of Istanbul International Modern Scientific Research Congress published by IKSAD Global publishing, İKSAD GLOBAL PUBLISHING, ISBN: 978-605-70671-3-5, June 2021 (Oral)

4. Contextualising Flipped online content with Learner Centric Moocs Model in Physics Education for Engineering Physics Students, Neelima Agarwal (CBIT), in International Hazar scientific researchers conference -II, Baku, Azerbaijan, Khazar University on 10-12th April 2021(Oral)

5. Contextualising Flipped teaching with learner centric Moocs model in Physics Education, Neelima Agarwal (CBIT), in Covid 19: A holistic approach towards sustainability organised by Bharat College of Commerce, IQAC, Mumbai University on 9th April 2021(Oral)

6. Contextualising online teaching with learner centric Moocs Model in Physics Education, Neelima Agarwal (CBIT), in 53rd national conference of IATE on Teachers development: concerts and perspective organised by Indian Association of Teachers Educators(IATE) in collaboration of SPPU University, Pune on 3rd-4th April 2021(Oral)

7. Contextualising Flipped online content with Discussion Forum for engineering Physics students, Neelima Agarwal (CBIT), in NCMRSH organised by Arasu Engineering college on 24th March 2021(Oral)

8. WW production at LHC at NLO in extra dimension models, Neelima Agarwal, V Ravindran, A Tripathi, VK Tiwari, PoS, 0462011

9. Working group report: Physics at the Large Hadron Collider, DK Ghosh, A Nyffeler, V Ravindran, Neelima Agarwal, P Agarwal, Pramana 76 (5), 707-7232011

10. Physics beyond Standard Model: Working group 3 report Guchait, M., Vempati, S.K., Agarwal, Neelima., Vaidya, R., Vempati, S.Pramana - Journal of Physics, 2009, 72(1), pp. 239–250

International Journal :

1. Power Corrections to event shapes using eikonal dressed gluon exponentiation,Neelima Agarwal (CBIT), Ayan Mukhopadhyay(IITH), Sourav Pal (IITH), Anurag Tripathi (IITH), Journal of High Energy Physics 03 (2021) 155 (**IF 5.8)DOI**

2. Cwebs beyond three loops in multiparty amplitudes**,** Neelima Agarwal (CBIT), Lorenzo Magnea (CERN and Turin U. And INFN), Sourav Pal (IITH), Anurag Tripathi (IITH) Journal of High Energy Physics 03(2021) 188. (**IF 5.8)DOI**

3. Multiparton webs beyond three loops**,** Neelima Agarwal (CBIT), A Danish, L Magnea, S Pal, A Tripathi, Journal of High Energy Physics 2020 (2003.09714), 1-52202 (**IF: 5.8**)DOI

4. Resummed transverse momentum distribution of pseudo-scalar Higgs boson at $NNLO_A$+NNLL, Neelima Agarwal (CBIT), P Banerjee, G Das, PK Dhani, A Mukhopadhyay, V Ravindran, Journal of High Energy Physics 2018 (12), 105,2018 (**IF: 5.54 in 2018**)DOI

5. Z boson pair production at the LHC to O (αs) in TeV scale gravity models, Neelima Agarwal, V Ravindran, VK Tiwari, A Tripathi, Nuclear Physics B 830 (1-2), 248-270,2010 (**IF: 5.4 in 2010)DOI**

6. WW production in large extra dimension model at next-to-leading order in QCD at the LHC, Neelima Agarwal, V Ravindran, VK Tiwari, A Tripathi,Physical Review D 82 (3), 036001,2010 (**IF: 4.3in 2010**)DOI

7. , Next-to-leading order QCD corrections to $W^+ W^-$ production at the LHC in Randall–Sundrum model, Neelima Agarwal, V Ravindran, VK Tiwari, A Tripathi, Physics Letters B 690 (4), 390-395,2010, **(IF: 4.1 in 2010)DOI**

8. Next-to-leading order QCD corrections to the Z boson pair production at the LHC in Randall–Sundrum model, Neelima Agarwal, V Ravindran, VK Tiwari, A Tripathi, Physics Letters B 686 (4-5), 244-248,2010,**(IF: 4.1 in 2010)DOI**

9. Dijet production at the LHC through unparticles, Neelima Agarwal, MC Kumar, P Mathews, V Ravindran, A Tripathi, Physical Review D 80 (3), 035015,2009 (**IF: 4.3 in 2009**)DOI