faculty Profile

(updated in July, 2020)

Name: ATRI DESHAMUKHYA Designation : PROFESSOR Department/ Centre : Physics Phone Number: 03842-270843 (Office) 9954041961 (Mobile)

Email id : <u>atri.deshamukhya@gmail.com</u>



Educational Qualification : M Sc in Physics (Gauhati University, 1995), PhD in Physics (Gauhati University, 2001), PG Diploma in HRM (Symbiosis, Pune, 2012)

Areas of Interest : High Energy Physics, Cosmology, Atmospheric Physics

Work Experience

Name of the	Designation	Period		Nature of Post
Organization		From	to	(permanent/temporary/Adhoc/ contractual etc.)
G C College	Lecturer	2001	2007	
Mizoram University	Lecturer	2007	2007	
Assam University	Lecturer	2007	2009	
Assam University	Reader	2009	2012	
Assam University	Associate Professor	2012	2015	Permanent
Assam University	Professor	2015		

Projects

Project Title	Awarding Agency	Period	Amount	Ongoing/ Completed
Analytical	UGC	2004-2006	30,000/-	Completed
Solotuion of	F.5-124/2003-			
coupled functions	04(MRP/NERO)/1712/			
	213 dt June 25, 2004			
Perturbations and	UGC	2007-2009	70,000/-	Completed
other aspects in	F.5-41/2006-07			
Tachyon	(MRP/NER)/5539 dt			
Cosmology	March 28, 2007			
A Study of Warm	Dept of Atomic	2009-2013	13 lakhs (Completed
Inflationary	Energy,		approx)	
Scenario in String	Govt of India			
Inspired	2009/37/24/BRNS			
Cosmology				

Publications in Peer Reviewed Journals (Selected 5)

Author(s)	Title of the	Name of	Journal Details	ISSN
	Paper	the Journal		
Pampi malakar, Amit Kesarkar, Jyoti Bhate and Atri Deshamukhya	Appraisal of Data Assimilation Techniques for dynamical downscaling of Structure and Intensity of Tropical Cylones	Earth and Space Science	2020 Vol 7, e2019EA000945. https://doi.org/10.1029/2019EA000945	2333- 5084 (Web)
Partha Roy, Rupraj Biswasharma, Atri Deshamukhya and Sanjay Sharma	Spatial and seasonal variation of rainfall contribution by the height spectrum of precipitation systems and associated cloud bulk properties over the South Asia	International Journal of Climatology	2020 2020;40:3771–3791. DOI: 10.1002/joc.6427	1932- 8036 (Online)
B Abida Choudhury, Subodh Kumar Saha, Mahen Konwar, K Sujith, Atri Deshamukhya	Rapid drying of NorthEast India in Last Three Decades : Climate Change or Natural Variability?	Journal of Geophysical Research: Atmosphere (American Geophysical Union)	2019 Vol 124, Issue 1 P 227-237	2156- 2202 (Web)
Asoke Das, Atri Deshamukhya, Pushpa Kalauni , S Panda	Bogoliubov Transformation and the Thermal Operator Representation in the real time formalism	Physicsl Review D (American Physical Union)	2018 Vol 97, p045015	2470- 0029 (online)
Anindita Bhattacharjee, Atri Deshamukhya	Warming up D3 brane motion in the background of D5 brane and Inflation	European Physics Journal C. (Springer)	20 14 Vol 74 Issue 11, p3135	1434- 6052

Peer Reviewed Publications in Proceedings of National/International Conference/Workshop/Symposium (Selected 5)

Authors	Title of the paper	Name of the Program	Publisher Details	ISSN/ISBN
		and Organizer		
Anshuman Baruah	Traversable	National Seminar on	Journal of Physics:	1742-6588 (ISSN)
and Atri	Lorentzian	Recent Trends in	Conference Series	
Deshamukhya	wormholes in higher	Physics.	2019 Oct (Vol. 1330,	
	dimensional theories	Physics, AUDC &	No. 1, p. 012001).	
	of gravity.	PANE		
B Abida	Study of Trends	Trends in	2015	978-81-920948-4-
Choudhury	of Soil Moisture	Mathematical	Department of	8 (ISBN)
and Atri	and	Science Research,	Mathematics, Assam	
Deshamukhya	Precipitation	Department	University	
	over NE region	Of Mathematics,		
	of India	Assam University		
Utpal Misra,	Effect of	Trends in	2015	978-81-920948-4-

Atri Deshamukhya and Sanjay Sharma University	Atmospheric forcing indices of rainfall anomaly in North East and North West India	Mathematical Science Research , Department Of Mathematics, Assam University, Silchar	Department of Mathematics, Assam University, Silchar	8(ISBN)
Anindita Bhattacharjee and Atri Deshamukhya	Non-Gaussian signatures arising from warm inflation driven by geometric tachyon	NCHEP, Department of Physics, Gauhati University	2014 J.Phys.Conf.Ser. Vol 481 p 012012 IOPScience	1742-6596 (ISSN)
Atri Deshamukhya	Effect of viscous pressure on warm inflation driven by motion of D3 branes in the background of D5 branes	National conference on current trends in particle physics research; Kalyani (India); 13-15 Mar 2014	2014 Department of Physics, University of Kalyani, Kalyani (India);	NA

Details of Ph.D degree awarded so far:

Name of the Scholar	Title of the Thesis	Year of Award
Begum Abida Choudhury	A study of recent climate change and extreme weather events over North Eastern states of India.	2020
Utpal Misra	A Study on regional variability of South west monsoon system over Indian Region	2020
Anal Ch Sharma	Study of Mesoscale Convective Systems with respect to Environmental Conditions and Microphysical Characteristics of Rainfall	2019
Partha Roy	A Study on Structural and Microphysical Properties of Rain Bearing Convective Clouds over Indian Summer Monsoon Region by using a Train Satellite Sensors.	2018
Anindita Bhattacharjee	A Study of few aspects of String Inspired Cosmology	2015