

## Degrees Awarded - 2020-21

Name of the PhD scholar	Name of the Department	Name of the guide/s	Title of the thesis	Year of registration of the scholar	Year of award of PhD
Krishnendu Mandal	DAA	Shravan Hanasoge	Helioseismic inferences of large-scale dynamics in the sun	26/04/2016	2020
Srimanta Banerjee	DAA	T. P. Singh Sudip Bhattacharya	Probing Theories of Gravity using Compact Objects	08/04/2016	2020
Mandar. D. Phatak	DBS	Mahendra Sonawane	Roll of cell size, cell number and cell retention in the homeostatic maintenance of zebrafish embryonic epidermis	23/10/2013	2020
Prateek Arora	DBS	Mahendra Sonawane	Genetic analysis of polarity establishment in the developing zebrafish epidermis	04/03/2015	2020
Triveni Menon	DBS	Sreelaja Nair	Analysis of the Impact of DNA content on Embryogenesis and Disease states in Danio rerio	06/09/2016	2020
Emroj Hossain	DCMPMS	Arnab Bhattacharya	Growth of gallium oxide singel crystals and exploration of novel substrates for gallium nitride epitaxy	04/07/2016	2020
Indranil Roy	DCMPMS	Pratap Raychaudhuri	Study of Vortex Dynamics and Phase Transitions in Superconducting Thin films	24/02/2017	2020
Yukti Arora	DCS	Deepa Khushalani	In search of new materials for electrical energy storage	17/02/2016	2020
Charu Seth	DCS	Deepa Khushalani	Stability Aspects and Optoelectronic properties of Hybrid Perovskites	30/12/2015	2020
Abhijit Mondal	DCS	Shyamalava Mazumdar	Stability, Non-enzymatic hydrolysis, and Abiological activity of CYP175A1	29/03/2016	2020
Simli Dey	DCS	Sudipta Maity	Understanding the secondary structure of Intrinsically Disordered Protein (IDP) aggregates as they transit from the solution to the membrane	26/02/2016	2020

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Jhansi Bhavani	DHEP	Gupta S. K. P.K. Mohanty	An extensive study of angular resolution of the Grapes-3 Experiment	30/07/2015	2020
Suman Chatterjee	DHEP	Gobinda Majumder	Jets as probes for precision measurement and candles for physics beyond standard model	28/02/2017	2020
Soubhik Sarkar	DNAP	Krishnamurthy M.	Time-resolved study of intense laser cluster interaction	29/04/2015	2020
Angana Mondal	DNAP	Krishnamurthy M.	Dynamics of relativistic electron generation in laser-droplet interaction at 10 16W/cm <sup>2</sup> (check in file)	10/05/2016	2020
Sounak Biswas	DTP	Kedar Damle	Computational Studies of Frustration and Disorder	11/02/2016	2020
Aisha M. Kawalkar	HBCSE	Jyotsna Vijapurkar	Transacting Inquiry in middle School Science Classrooms: A Study Exploring the nature of discourse and a spectrum of outcomes	17/04/2009	2020
Gurinder Singh	HBCSE	Karen Haydock K. K. Mishra	Open-Beginninged' Science Explorations: Students' Questions, Methods of Investigations and their Interrelations	22/09/2014	2020
Deborah Dutta	HBCSE	Sanjay Chandrasekharan Ankush Gupta	Urban farming in schools to nurture environmental practices: Motivating action towards sustainable future	18/01/2017	2020
Soumyadeep Chaudhuri	ICTS	Loganayagam Ramalingam	Out of time ordered effective dynamics of a Brownian particle	10/06/2016	2020
Amith K. Shastri	Maths-Mumbai	Parameswaran A. J.	Character on a Homogenous Space and Anti-Affine Groups	09/12/2016	2020
Ankit Rai	Maths-Mumbai	Arvind Nair	Lefschetz properties for orthogonal Shimura varieties	19/12/2016	2020

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Aanchal Jatindrakumar Bha	NCBS	Upinder Bhalla	Optical Examination of Plasticity, balance and computation in the hippocampal CA3 to Ca1 Microcircuit	01/07/2011	2020
Jesvin Singh Madan	NCBS	Sumantra Chattarji	Effects of stress on the spatio-temporal patterns of de-novo trasnclation across the hippocampus and amygdala	09/07/2012	2020
Joseph Mathew	NCBS	Satyajit Mayor	Molecular Mechansm and Functional Implications of the Active Nonocustering of GPI-Anchored Proteins	02/07/2013	2020
Sahil Moza	NCBS	Upinder Bhalla	ROBUST MEMORY AND PRECISE BALANCE: COMPUTATION WITH BIOLOGICAL NETWORK MOTIFS	07/07/2014	2020
Mary K. Johnson	NCBS	Gaiti Hasan	Structural and biochemical characterization of MsDpo4 from Mycobacterium smegmatis	07/07/2014	2020
Harish Kumar	NCBS	Jayant Udgaonkar	To understand the co-aggregation mechanism of tau- K18 (4R) and tau-K 19 (3R) protein and effect of FTDP-17 mutation on this mechanism	03/07/2015	2020
Dilawar Singh	NCBS	Upinder Bhalla	Modeling memory through molecules: Subunit exchange information retention by CaMKII	31/07/2017	2020
Deepanjali Dwivedi	NCBS	Upinder Bhalla	Precision in rate and temporal coding in WT vs Fmr1 KO mouse model	02/02/2017	2020
Nayana A. J.	NCRA	Poonam Chandra	Most energetic explosions and their environments	01/08/2016	2020
Avishek K. Basu	NCRA	Bhal Chandra Joshi Co-Guide- Dipankar Bhattacharya(IUCAA)	Erratic Behaviour of Neutron Stars	05/10/2016	2020
Gowtham Raghunath Kurri	STCS	Vinod M. Prabhakaran	Coordination over networks: Shared Randomness, security and Interaction	02/05/2016	2020

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Timir Baran Sil	TCIS	Kanchan Garai	Bio Physical characterization of Apolipoprotein E amyloid Beta interactions and its implications in cellular toxicity	02/06/2015	2020
Indrajit Tah	TCIS	Smarajit Karmakar	Role of Static and Dynamic Length Scales in Glass Transition	18/05/2016	2020
Rajsekhar Das	TCIS	Smarajit Karmakar	Understanding the dynamics of glass-forming liquids with externally imposed disorders	29/06/2016	2020
Rayan Chatterjee	TCIS	Sriram Ramaswamy Prasad Perlekar	Active Polar suspensions: Stability and Turbulence	25/02/2016	2020
Bhanu Prasad Bhowmik	TCIS	Smarajit Karmakar	Numerical and Experimental study of Dynamical and Mechanical Properties of Glass Forming Liquids	19/07/2016	2020
Sudeshna Patra	TCIS	Narayanan T. N.	Viscoelastic and Ion Transport Properties of Solid State Electrolytes for Batteries and Water Electrolysis Cells	24/06/2016	2020
Mrinmoy Mukherjee	TCIS	Jagannath Mondal Co-Guide-Smaratjit Karmakar	Investigation of Role of Cosolute on Conformational Landscape of macromolecules	28/10/2016	2020
Pankaj Popli	TCIS	Surajit Sengupta	Statistics of non-affine displacements: Defect precursors and stability of lattices	19/08/2016	2020
Shivnarayan Dhuppar Tilke	TCIS	Aprotim Mazumder	On Cell Cycle-Dependent DNA Damage Responses and Gene Expression Assayed from Microscopic Image Analysis	24/05/2016	2020
Jishan Bari Khandekar	TCIS	Chary K. V. R Kalyaneshwar Mondal	Biomolecular NMR Studies on GS7W Mutant of Human (gamma)S-Crystallin and its Role in Dominant Congenital Cataract	03/03/2017	2020

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Suman Kumar Sahoo	CAM	Venkateswaran P. Krishnan	Inverse Problems related to integral geometry and parabolic partial differential equation	28/08/2017	2021
Dattaraj Bhalchandra Dhuri	DAA	Shravan Hanasoge	Machine Learning Studies of Pre-Flare and Pre-Emergence Magnetic Fields in Solar Active Regions	04/04/2016	2021
Shivani Ashwin Upadhyay	DBS	Rao B. J. Ullas Kolthur	Regulation of Photosynthesis and Respiration by Tor Kinase in <i>Chlamydomonas Reinhardtii</i>	05/08/2016	2021
Banoj Kumar Nayak	DCMPMS	Achanta Venugopal	Light matter interaction in photonic and plasmonic structures	21/06/2016	2021
Sayani Das	DCS	Ankona Datta	Design and Development of Optical Probes for Tracking Essential and Toxic Metal Ions	18/08/2015	2021
Imon Mandal	DCS	Ravindra Venkatramani	Discovery and characterization of New Charge Transfer Transitions in optical UV-Vis Spectra of Proteins Rich in Charged Amino Acids	08/06/2015	2021
Nairit Sur	DHEP	Tariq Aziz Shashi Dugad	Search for Charged Charmonium-like $Z$ (tetraquark) States with the CMS experiment at LHC	26/06/2013	2021
Soham Bhattacharya	DHEP	Manoranjan Guchait	Top squark search in a ditau final state with the CMS detector and a study of the impact of using the HO calorimeter for the CMS Level-1 muon trigger	06/03/2017	2021
Uttiya Sarkar	DHEP	Gagan Mohanty	Search for new Physics in the final state of boosted Bosons and missing transverse energy with CMS	17/07/2017	2021
Indranil Halder	DTP	Shiraz Minwalla	Aspects of Matter Chern-Simons theories : Phases, Response and duality	16/11/2017	2021

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Amit Sharma	HBCSE	Sugra Chunawala	Inclusive Science Education in Elementary and Secondary Schools With a Focus on Strategies for Teaching Science to Children With Visual Impairments	18/02/2011	2021
Shikha Takker	HBCSE	Subramaniam K.	Investigating and Supporting Teachers' Knowledge of and Responses to Students' Mathematical Thinking	04/10/2011	2021
Anugu Sumith Reddy	ICTS	Amit Apte	Asymptotic Properties of Non-linear Filters	17/05/2017	2021
Ritabrata Thakur	ICTS	Rama Govindarajan	Nonlinear instability and turbulence suppression in stratified flows	19/08/2016	2021
Rahul Chajwa	ICTS	Govindaarajan R/Sriram Ramaswamy Narayan Menon	Driven Stokesian suspensions : particle anisotropy, effective inertia and transient growth	13/10/2016	2021
Amritendu Mukhopadhyay	NCBS	Mahesh Sankaran	The ecology and evolution of floral strategies clerodendrum infortunatum	01/07/2011	2021
Lalitha Krishnan	NCBS	Mahesh Sankaran	The effects of pulsed rainfall on the growth and survival of dry forest tree seedlings	09/07/2012	2021
Nihav Dhawale	NCBS	Mukund Thattai Madhusudhan Venkadesan(Co-guide)	How to run on uneven Terrain	02/07/2013	2021
Anubhab Khan	NCBS	Uma Ramakrishnan	The population genomics of isolated tigers in the wild	07/07/2016	2021
Avishek Ghosh	NCBS	Raghu Padinjat	Identifying the biochemical messenger for Phosphatidylinositol 5-phosphate 4-kinase (PIP4K) function in Drosophila	28/01/2015	2021
Riddhi Madhav Deshmukh	NCBS	Krushnamegh Kunte	The Genetic And Developmental Bases of wing patterns in Papilio swallowtail Butterflies	07/07/2016	2021

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Kiran Sankar Chatterjee	NCBS	Ranabir Das	On the Structure to Function Relation of SUMO Fold	02/02/2017	2021
Sushma Kurapati	NCRA	Jayaram N. Chengalur	Angular momentum and dark matter in void dwarf galaxies	05/08/2016	2021
Surajit Mondal	NCRA	Divya Oberoi	Studying the extremes of solar activity using high dynamic range low frequency solar images	28/07/2017	2021
Biny Sebastian	NCRA	Priti Kharb	Understanding Radio Outflows in Seyfert Galaxies	08/11/2016	2021
Abhishek Kumar Singh	STCS	Raja N.	Formalising Finite Set Combinatorics in Type Theory	10/03/2015	2021
Aditya Nema	STCS	Pranab Sen	Some derandomised constructions in Quantum information processing	28/01/2016	2021
Lokrshi Prawar Dhadichi	TCIS	Surajit Sengupta Sriram Ramaswamy	Active Matter: fundamentals, non-mutual interaction and anomalous hydrodynamics	01/08/2017	2021
Avijit Maiti	TCIS	Anukul Jana	Synthesis and Characterization of rationally designed Carbene-based Kekule and non Kekule Diradicals	20/03/2017	2021