

# S N Bose National Centre for Basic Sciences

In Collaboration with the

## University of Calcutta

INTEGRATED Ph.D. PROGRAMME IN PHYSICAL SCIENCES (IPhD-Ph) - 4TH SEMESTER - SPRING (JAN-MAY) 2023

### CLASS SCHEDULE

	09:30 - 10:30	10:45 - 11:45	12:00 - 13:00	13:00 - 14:00	14:00 - 15:00	15:15 - 16:15	16:30 - 17:30
MON	PHY 401	PHY 413	PHY 413	L U N C H	PHY 405	PHY 401	PHY 407
TUE	PHY 416	PHY 416	PHY 403		PHY 491	PHY 491	PHY 491
WED	PHY 401	PHY 405	PHY 405		PHY 403	PHY 403	PHY 407
THU	PHY 401	PHY 413	PHY 413		PHY 491	PHY 491	PHY 491
FRI	PHY 416	PHY 416	PHY 403		PHY 405	PHY 407	PHY 407

CODE	SUBJECT	FACULTY	STUDENTS
PHY 401	Project Research III (Compulsory Course)	Faculty Supervisors	All Students
PHY 491	Methods of Experimental Physics (Compulsory Course)	Faculty Experts	All Students
PHY 403	Astrophysics & Astronomy (Compulsory Elective)	Ramkrishna Das & Soumen Mondal	All Students
PHY 405	Biological Physics (Compulsory Elective)	Manoj Mandal	Prapti Mukherjee, Sayari Bhattacharya, Shrabasti Banerjee
PHY 407	Advanced Quantum Field Theory (Optional Elective)	Sunandan Gangopadhyay & Rabin Banerjee	Anish Chaudhuri, Debendra Meher, Souvik Paul, Prerak Gupta
PHY 413	Quantum Information Theory (Optional Elective)	Manik Banik	Anish Chaudhuri, Debraj Dutta, Partha Patra
PHY 416	Soft Matter (Optional Elective)	Jaydeb Chakrabarti	All Students except Anish Chaudhuri

CLASSES TO START FROM 5TH JANUARY 2023. VENUE: CLASS ROOM 214, PHY 407: ROOM 215.



*Amitabha Lahiri* 04/01/2023

**Amitabha Lahiri**  
Dean (Academic Programme)

Compulsory Electives - Sem 4		Optional Electives - Sem 4	
403 - Astrophysics & Astronomy	406 - Advanced Mathematical Methods	410 - Non-Linear Dynamics	414 - Theory of Elementary Particles
404 - Chemical Physics	407 - Advanced Quantum Field Theory	411 - Optical Physics	415 - Mesoscopic Physics
405 - Biological Physics	408 - Advanced Statistical Physics	412 - Correlated Electrons & Disorder	416 - Soft Matter
	409 - Magnetism & Superconductivity	413 - Quantum Information Theory	417 - General Relativity & Cosmology