

**Department of Physics/Undergraduate program
Indian Institute of Science, Bangalore-12**

PH-212: Experiments in Condensed Matter Physics (JAN-2019)

Students: 2nd sem Integrated PhD-Physics and 6th Semester UG-Physics majors

Seminar Time table

Time: 2:00 pm (wednesdays)

2/3 students per day and 25(20+5) minutes per seminar

Topic #	Topics	Name	Date
1	Nanotechnology: Synthesis, characterization and applications	Srishty Aggarwal	23/01/2019
2	Solar cells: technology, measurements, and applications	Souvik Chakraborty	23/01/2019
3	Noise measurement techniques	Ujjal Roy	30/01/2019
4	Superconducting Qubit	Ankit Khandelwal	30/01/2019
5	Semiconductor Physics	Sayanta Goswamy	06/02/2019
6	Molecular spectroscopy (Raman & IR)	Camellia Bose	06/02/2019
7	Atomic cooling/Optical tweezer	Nayana V	13/02/2019
8	Spin resonance techniques (NMR/ESR): Principles and applications	Palash Kusum Das	13/02/2019
9	Thermoelastic and Thermal conducting (Thermostat)	Abhishek Dubey	27/02/2019
10	Scanning probe microscopy (Basics principles of AFM and STM)	Poonam Sharma	27/02/2019
11	Data acquisition and Interface techniques (PID)	Brijesh Kanodia	06/03/2019
12	X-ray diffraction (production and application in structure elucidation)	Soham Mandal	06/03/2019
13	Super conductivity	Saisab Bhowmik	13/03/2019
14	Detectors for electromagnetic radiation (complete spectrum)	Aniket Manumdar	13/03/2019
15	Biophysics/ liquid crystals approach	Namana V	13/03/2019
16	Low vacuum instrumentation, measurements and applications	Navkriranjot Kaur Gill	20/03/2019
17	Quantum Capacitance	Prasanjit Aich	20/03/2019
18	Thin films: technology, measurements, and applications	Pingal P. Nath	20/03/2019
19	Lasers (types of lasers and application)	Pranjul Garg	27/03/2019
20	Magnetic materials: Characterizations and applications	Manoj Kumar Nag	27/03/2019
	Light scattering from colloidal systems		
	Cryocoolers: Production and usage of low temperatures		

Note: Prepare your talk (in consultation with research groups working in the selected topic at IISc) as power point presentation well in advance and discuss with your friends/mentors.