Centre for Theoretical Physics

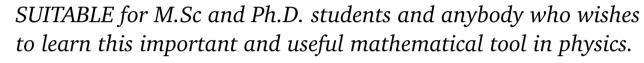


Lecture Course Introduction to Group Theory in Physics

Starting 31st January 2017 (tentatively till April end)

Afsar Abbas

Centre for Theoretical Physics, JMI.



TOPICS to be covered: Basic Symmetry Concepts, Group Theory - Fundamental Concepts, Torsion Group and Betti Number, Matrices and Linear Vector Space, Unitary Symmetry, Permutation Symmetry, Young Diagram, Representation Theory, Space-time Symmetries, Symmetry in Quantum Mechanics, Fractional Quantum Hall Effect, Quantum Chromodynamics, Quark Model, Glashow-Salam-Weinberg Model, Neutrino Oscillation, Dark Matter and Dark Energy, Symmetry in Nuclei, Quark Gluon Plasma, Quantum Groups, Groups in Topology, plus more.

Lecture 1	31 January, 3:30-4:30	Lecture 2	1 February, 3:30-4:30
Lecture 3	7 February, 3:30-4:30	Lecture 4	8 February, 3:30-4:30
Later	every Tuesday, 3:30-4:30	and	every Wednesday, 3:30-4:30

Venue: CTP Seminar Room **Centre for Theoretical Physics** Jamia Millia Islamia New Delhi, India. www.ctp-jamia.res.in

