

NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Physics - NOC:Introduction to Quantum Field Theory (Theory of Scalar Fields) - Part 2

Subject Co-ordinator - Prof. Anurag Tripathi

Co-ordinating Institute - IIT - Madras

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - Scattering Matrix
Lecture 2 - Scattering Matrix (Continued...)
Lecture 3 - Scattering Matrix (Continued...)
Lecture 4 - Creating single particle states - 1
Lecture 5 - Creating single particle states - 2
Lecture 6 - Annihilating single particle states
Lecture 7 - Creating Multiparticle States
Lecture 8 - LSZ reduction
Lecture 9 - LSZ reduction (Continued...)
Lecture 10 - S matrix
Lecture 11 - S matrix (Continued...)
Lecture 12 - S matrix (Continued...)
Lecture 13 - Pole and residue of the propagator
Lecture 14 - Kallen-Lehmann spectral representation
Lecture 15 - Kallen-Lehmann spectral representation (Continued...)
Lecture 16 - High Energy Experiment Setup - 1
Lecture 17 - High Energy Experiment Setup - 2
Lecture 18 - Scattering cross-section
Lecture 19 - Differential cross-section
Lecture 20 - 2-2 scattering cross-section
Lecture 21 - Loop diagrams - 1
Lecture 22 - Wick rotated Green's functions
Lecture 23 - UV divergences - Part 1
Lecture 24 - UV divergences - Part 2
Lecture 25 - UV divergences - Part 3
Lecture 26 - Explicit evaluation of Feynman integrals
Lecture 27 - Few more Feynman integrals
Lecture 28 - UV Singularity structure in dimensional regularization
Lecture 29 - Renormalization - Part 1

Get DIGIMAT For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

<http://www.digimat.in>

NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

- Lecture 30 - Renormalization - Part 2
- Lecture 31 - Renormalization - Part 3
- Lecture 32 - Renormalization - Part 4
- Lecture 33 - Renormalization - Part 5
- Lecture 34 - Renormalization Group Equation - 1
- Lecture 35 - Renormalization Group Equation - 2
- Lecture 36 - Renormalization Group Equation - 3
- Lecture 37 - Solution of Callan Symanzik Equation
- Lecture 38 - UV and IR fixed points and Asymptotic Freedom
- Lecture 39 - Behaviour near fixed point