NPTEL Video Course - Physics - NOC:Foundations of Classical Electrodynamics

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

Lecture 30 - Electrostatic energy (Continued...)
Lecture 31 - Electrostatic energy calculation
Lecture 32 - Electrostatic dipole
Lecture 33 - Electric dipole (Continued...)
Lecture 34 - Multipole expansion
Lecture 35 - Monopole and Dipole moment
Lecture 36 - Quadrupole moment
Lecture 37 - Dipole and Quadrupole moment (Continued...)
Lecture 38 - Conductor
Lecture 39 - Conductor (Continued...)
Lecture 40 - Boundary condition
Lecture 41 - Electrostatic pressure, Capacitor
Lecture 42 - Energy of the Capacitor, Dielectric
Lecture 43 - Dielectric (Continued...)
Lecture 44 - Displacement Vector
Lecture 45 - Electrostatic boundary value problem
Lecture 46 - Electrostatic boundary value problem (Continued...)
Lecture 47 - Electrostatic boundary value problem (Continued...), Image method
Lecture 48 - Image method (Continued...)
Lecture 49 - Charge particle in magnetic field
Lecture 50 - Biot-Savart Law
Lecture 51 - Application of Biot-Savart Law
Lecture 52 - Ampere's Law
Lecture 53 - Application of Ampere's Law
Lecture 54 - Magnetic vector potential
Lecture 55 - Magnetic vector potential (Continued...)
Lecture 56 - Magnetic dipole moment
Lecture 57 - Magnetic dipole moment (Continued...)
Lecture 58 - Torque and potential energy of magnetic dipole, Magnetization
Lecture 59 - Bound Current
Lecture 60 - Magnetic materials
Lecture 61 - Electromagnetic Induction
Lecture 62 - Self and mutual inductance
Lecture 63 - Wave equation, Maxwellâ s Equation
Lecture 64 - Maxwells Equation (Continued...)
Lecture 65 - Maxwells Equation: a complete overview
Lecture 66 - Maxwells Equation: a complete overview (Continued...)
Lecture 67 - Lorentz Gauge, Maxwell's wave equation
Lecture 68 - Maxwell's wave equation (Coninued...)

Lecture 69 - Maxwell's Equation in matter
Lecture 70 - Maxwell's Equation in matter (Continued...)
Lecture 71 - Tutorial 2 (Electrostatic)
Lecture 72 - Tutorial 3 (Magnetostatic)
Lecture 73 - Tutorial 4 (Magnetostatic and EM Wave)