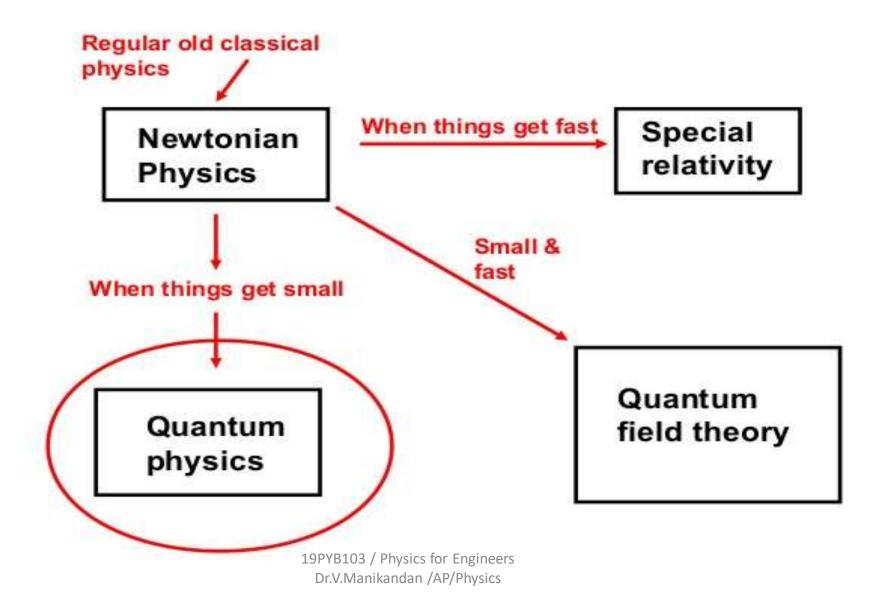
UNIT-II

QUANTUM PHYSICS

ORIGIN OF QUANTUM PHYSICS



Why Quantum Physics?

- Classical mechanics (Newton's mechanics) and Maxwell's equations (electromagnetic theory) can explain MACROSCOPIC phenomena such as motion of billiard balls or rockets.
- Quantum mechanics is used to explain microscopic phenomena such as photon-atomic scattering and the flow of electrons in a semiconductor. The behavior of a "microscopic" particle is different from that of a classical particle:
 - in some experiments it resembles the behavior of a classical wave (not localized in space)
 - in other experiments it behaves as a classical particle (localized in space)

ORIGIN OF QUANTUM PHYSICS

