

Exam Final - Each problem is 20 points

1. For given charge distribution $\rho(r)$ obtain the expression for the form - factor within Born Approximation. Obtain the formulae for evaluation of the radius of the composite quantum particle.
2. Prove the invariance of entangled qubits with respect to the direction of the measuring instruments
3. Show that NOT, AND and NAND operators are functionally complete
4. Describe the Quantum Teleportation
5. Give the detailed description of Deutsch - Tosza Algorithm