

"Quantum minimum"

1. The wavelength of de Broglie
2. Wave function. The physical meaning of the wave function
3. Definition of a Hermitian operator. The eigenfunctions and eigenvalues of a Hermitian operator
4. The average value of the operator of a physical quantity
5. The Schrödinger wave (time-dependent) equation
6. The stationary (time-independent) Schrödinger equation. The Hamiltonian operator.
7. Position, momentum, and angular momentum operators
8. The uncertainty relation for the coordinate and momentum
9. The concept of spin. The Pauli Exclusion Principle
10. The Bohr – Sommerfeld quantization rules