

SEMINARS:

| The topic № | Name of topics for class | Number of hours | Maximum score |
|-------------|---|-----------------|---------------|
| 1 | Type of scattering matrix | 1 | 8 |
| 2 | Same particles and statistical physics | 1 | 8 |
| 3 | The scattering operator in the continuous case | 1 | 8 |
| 4 | S-matrix, dispersion relations | 1 | 8 |
| 5 | The Green's function and perturbation theory | 1 | 8 |
| 6 | Operator algebra. The time Green's function | 1 | 8 |
| 7 | The wave function in the semiclassical approximation | 1 | 8 |
| 8 | Parametric excitation of a quantum oscillator | 1 | 8 |
| 9 | Heisenberg representation and canonical transformations | 1 | 8 |
| 10 | Section. Unitarity and symmetry of the S matrix. | 1 | 8 |
| 11 | Threshold phenomena. | 1 | 8 |
| 12 | General formulas for scattering cross sections | 1 | 8 |
| 13 | The formula for determining the amplitudes of various processes | 1 | 8 |
| 14 | Reactions with neutrino emission | 1 | 8 |
| 15 | Multiplication in the case of several channels | 1 | 8 |