

Hadron Spectroscopy and Amplitude Analysis Theoretical Tools Preliminary Lecture Schedule

1. Causality and Analyticity.
2. Scattering in nonrelativistic quantum mechanics.
3. Kinematics of relativistic scattering and decays.
4. Relativistic partial wave analysis, unitarity, analyticity and resonances.
5. General parametrizations: N/D, K-matrix, Omnes function, connection with lattice QCD.
6. Physics of exchange reactions, space-time picture of high-energy collisions.
7. Regge limit and the Veneziano amplitude.
8. New hadrons observed in particle decays?