

Research experience in:

Nuclear Structure and Collective Motion in many-body systems, Boson Models

Superconducting correlations

Path Integral techniques in the Many-body Problem

Generalized Coherent States

Group Theory methods in Many-body Problem

Fundamental Symmetries in Many-body Systems

Structure of complex excited states in many-body systems

and Quantum Chaos manifestations, statistical theory of compound states

Parity and Time reversal violations in nuclei, Weak interaction in nuclei

Meson exchange & strong nuclear forces

Ensemble description of Disorder effects in condensed matter physics

Random matrix theory

Scattering theory

Inverse Scattering Theory

Integrable nonlinear systems and Lattices

Solitons and their applications

Quantized Inverse scattering theory (Bethe Ansatz)

Neutrino induced nuclear reactions, weak processes, muon capture

Exotic nuclei; Halo nuclei and parity violation in Exotic nuclei

Multiphonon Giant Resonances, Coulomb excitation

Relativistic heavy ion collisions

Bose condensation in interacting systems, Atomic traps

Electron-Atom scattering