

- Main theme: to find if, why, under which conditions the full many-body wave functions organize themselves within simple schemes and substructures (pairs, quartets, etc)
- Dependence on the strengths and forms of the interactions (including $T=0$ and $T=1$), on the mass number (movement of the Fermi surface and relevant single-particle states), on spin-orbit, on coupling to deformation and rotation. Search for dominant components in ground states and excited states
- Different approaches: fully fermionic, bosonic, etc. Role of symmetries and algebraic approaches. Different (schematic) interactions. Calculation for schematic model spaces. Need to compare different models and test the different approximations
- From correlations in configuration space to correlations in real space. From correlated fermion pairs to two-particle "cluster", from quartets to alpha clusters. Onset of clusterization in relativistic EDF approach
- Test of the properties of np pairs and of n-p interaction via dynamical probes (d-transfer, charge-exchange, etc). Mixing of structure and reaction mechanism.