

Seminar

Imbalanced Fermi gas and exotic superfluid phases

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In this talk I would discuss about the behavior of Fermi superfluids involving imbalance in the population of the fermionic species. The consequence of such an imbalance is the realization of the exotic superfluid state viz. the Fulde-Ferrell-Larkin-Ovchinnikov (FFLO) state. Unlike the conventional BCS super-conductors the imbalance in population gives rise to finite momentum pairing between the fermions, thereby leading to superfluid state with spatial modulations. I would discuss the ground state and finite temperature behavior of such systems and about their possible experimental realizations.

Thursday, Feb 8th 2018

04:00 PM (Tea/Coffee at 03:30 PM)

Auditorium, TIFR-H