

Service de Physique Nucléaire



Séminaire

le jeudi 10 février 2011 à 16h

Attention : jour et heure inhabituels

CEA Saclay, Orme des Merisiers, Bât. 703, Salle 135

Exotic nuclear pairing condensates

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Spin-triplet pairing may compete favorably against ordinary spin-single pairing when neutron and proton numbers are equal and the nucleus is very large. We investigate this question using an energy functional derived from an empirical Hamiltonian parameterization the Bogoliubov approximation. Critical to the competition are the relative strengths of spin-single and spin-triplet interactions and the strength of the one-body spin-orbit field. For $N=Z$, strong spin-triplet pairing occurs just beyond the domain of physically realizable nuclei. Just off the $N=Z$ line, the condensate may have a mixed character with both spin-triplet and spin-singlet pairing.

Le café sera servi 10 minutes avant

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