

Tensor interaction in the extended Brueckner-Hartree-Fock theory

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There is a strong tensor interaction in the nucleon-nucleon interaction due to the pion exchange interaction. The tensor interaction cannot be treated within the Hartree-Fock approximation. We have developed an extended Brueckner-Hartree-Fock theory to treat the tensor interaction. With the use of the Bonn potential we are able to reproduce the saturation property of nuclear matter. We can show that the ground state wave function contains large momentum components.

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