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Neutron-Proton pairing and the Symmetry Energy in Nuclear Matter¹ YUAN TIAN, BAO-AN LI, ZHONG-YU MA — The effect of neutron-proton(n-p) pairing in symmetry energy is studied in the symmetric matter. A separable n-p pairing interaction has been introduced by adjusting the pairing properties of the bare nucleon-nucleon interaction in the symmetric matter. The isospin triplet channel T=1 n-p pairing has small effect on the symmetry energy, but the effects of isospin singlet channel T=0 n-p pairing is significant especially at very low densities.

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Yuan Tian

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