

## Materi Hyperon dalam pendekatan medan relativistik rata-rata

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### Abstrak

We study the hyperon effect on equation of state (EOS) in highly dense nuclear matter by introduce the isovector scalar -meson [ $\sigma(980)$ ] and the cross interactions where the neutron stars is assumed as a cold star ( $T = 0\text{K}$ ) and the calculation is carried out in the frame of relativistic mean-field theory. The Equation of state and matter compound fraction is calculated based on equilibrium theory by fulfilling the chemical potential equilibrium and the charge neutrality.

*Kami mempelajari efek hyperon terhadap persamaan keadaan materi dari materi nuklir berkerapatan tinggi dengan memperkenalkan meson isovektor skalar [ $\sigma(980)$ ] dan interaksi cross di mana bintang neutron diasumsikan dingin ( $T = 0\text{K}$ ) dan penghitungannya dikerjakan dalam kerangka teori medan relativistik rata-rata. Persamaan keadaan dan fraksi komposisi materi nuklir dihitung berdasarkan teori kesetimbangan-dengan memenuhi persamaan kesetimbangan potensial kimia dan kesetimbangan muatan.*