Proceedings of the 3rd China-Japan-Korea Hardron and Nuclear Physics 2008 Symposium

Pion Effect of Nuclear Matter in a Chiral Sigma Model

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摘要　We develop a new framework for the study of the nuclear matter based on the linear sigma model. We introduce a completely
new viewpoint on the treatment of the nuclear matter with the inclusion of the pion. We extend the relativistic chiral mean field
model by using the similar method in the tensor optimized shell model. We also regulate the pion　nucleon interaction by considering
the form　factor and short range repulsion effects. We obtain the equation of state of nuclear matter and study the importance
of the pion effect.

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