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Dynamical Breaking of Generalized Yang-Mills Theory

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Abstract: The dynamical breaking of a generalized Yang-Mills theory is discussed. It is shown, in terms of the Nambu-Jona-Lasinio mechanism, that the gauge symmetry breaking can be realized dynamically in the generalized Yang-Mills theory. The combination of the generalized Yang-Mills theory and the NJL mechanism provides a way to overcome the difficulties related to the Higgs field and the Higgs mechanism in the usual spontaneous symmetry breaking theory.

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Key words: Yang-Mills theory, dynamical breaking

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