

Restoring gauge invariance in non-Abelian second-class theories

In this work, we propose a generalization of the improved gauge unfixing formalism in order to generate gauge symmetries in the non-Abelian valued systems. This generalization displays a proper and formal reformulation of second-class systems within the phase space itself. Then, we present our formalism in a manifestly gauge invariant resolution of the $SU(N)$ massive Yang-Mills and $SU(2)$ Skyrme models, where gauge invariant variables are derived.

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