

## On the Equivalence of Regularization Schemes

YANG Ji-Feng

Department of Physics, East China Normal University, Shanghai 200062, China  
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Abstract: We illustrate via the sunset diagram that dimensional regularization 'deforms' the nonlocal contents of multi-loop diagrams with its equivalence to cutoff regularization scheme recovered only after sub-divergence was subtracted. Then we employed a differential equation approach for calculating loop diagrams to verify that dimensional regularization deforms the 'low energy' contents before subtraction. The virtues of the differential equation approach are argued especially in nonperturbative perspective.

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Key words: regularization scheme, nonperturbative context

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