

On vertex parts of p-adic Feynman amplitudes

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Abstract

We reduce the calculation of the vertex parts of p-adic Feynman amplitudes to a recursive procedure for evaluating singular parts of certain integrals. We propose an algorithm for calculating these integrals in the general form. As an example, we consider vertex parts of amplitudes in the ϕ^4 theory. © Pleiades Publishing, Ltd., 2009.

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