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A detour in de Sitter space while calculating vacuum fluctuations

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 [Keywords](#)
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Abstract: {We study vacuum fluctuations of different gravitational waves by taking a detour in de Sitter space in the intermediate steps. We find finite contributions when the coupling constant is dimensionless, whereas null result persists in the cases with dimensional coupling constants. We also test our method for exactly solvable cases, and show that no spurious perturbative effects are introduced through our method.



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