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Slow-roll inflation

using standard, Maldacena-like calculation

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Non-vacuum initial state

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$(k_3 \ll k_1 \approx k_3)$:

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arXiv: 1104.0244

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(…previous calculations looked for folded shape)

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Enhanced bispectrum from slow-roll inflation with a non-vacuum initial state

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What would Planck measure?

- We use the transfer function and 2D projection.

Enhanced bispectrum from slow-roll inflation with a non-vacuum initial state

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$N_k \equiv$ occupation number of mode with momentum k.

- We find that, for $N_k = \mathcal{O}(1)$,

$$f_{NL}^{measured} \gg \frac{5}{12}(1 - n_s) \approx 0.01$$

the expectation from the consistency relation

f_{NL} is enhanced! What are the implications?

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- **Is this f_{NL} observable?**

f_{NL} is enhanced! What are the implications?

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Come and ask me for specifics!