Spectroscopic Suppression

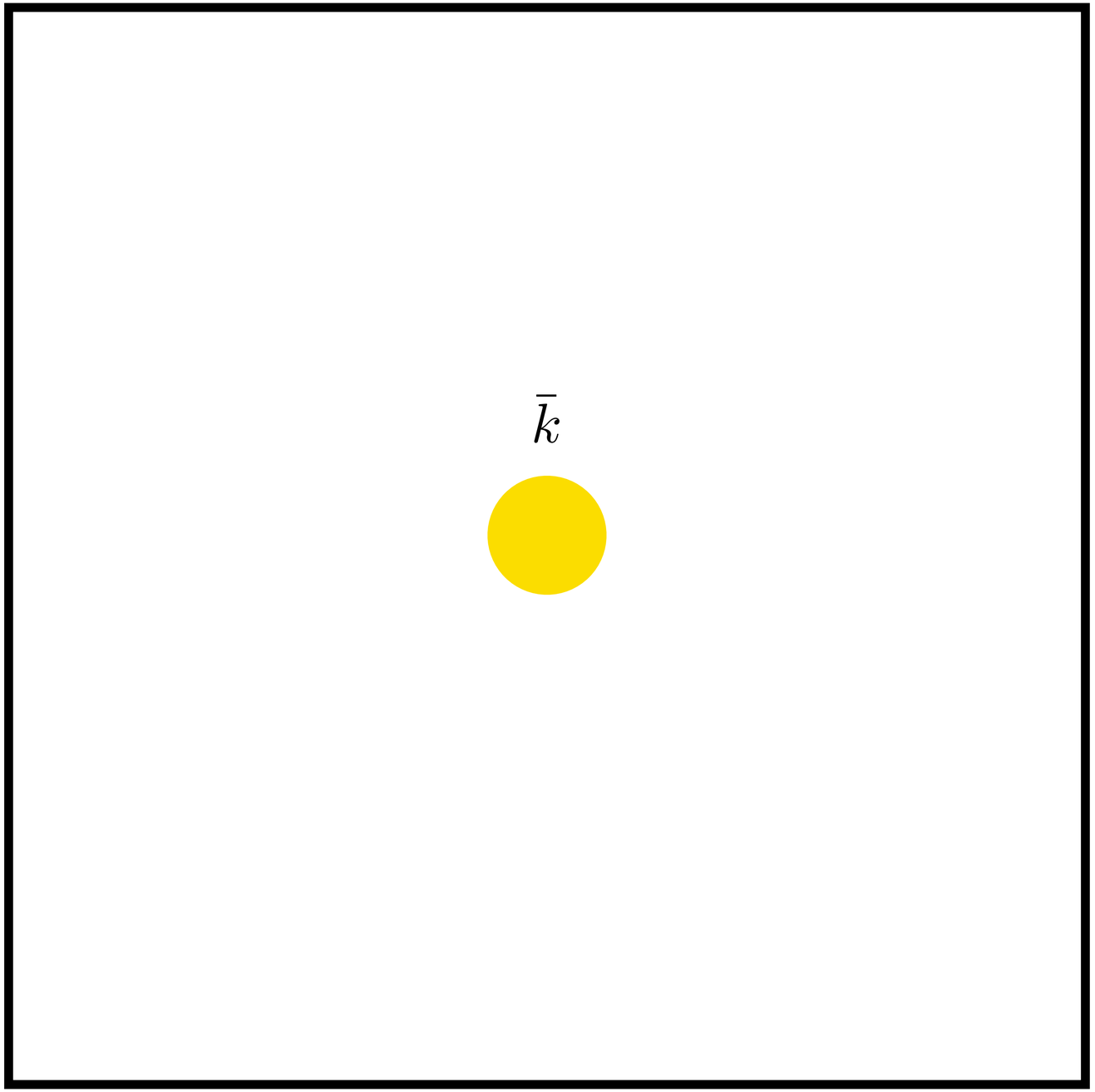
Marios Galanis

Perimeter Institute

From arXiv:2307.06989

with Ken Van Tilburg (NYU & CCA), Masha Baryakhtar (UW) and Neal Weiner (NYU)

FPII Wednesday Panel - October 30, 2024



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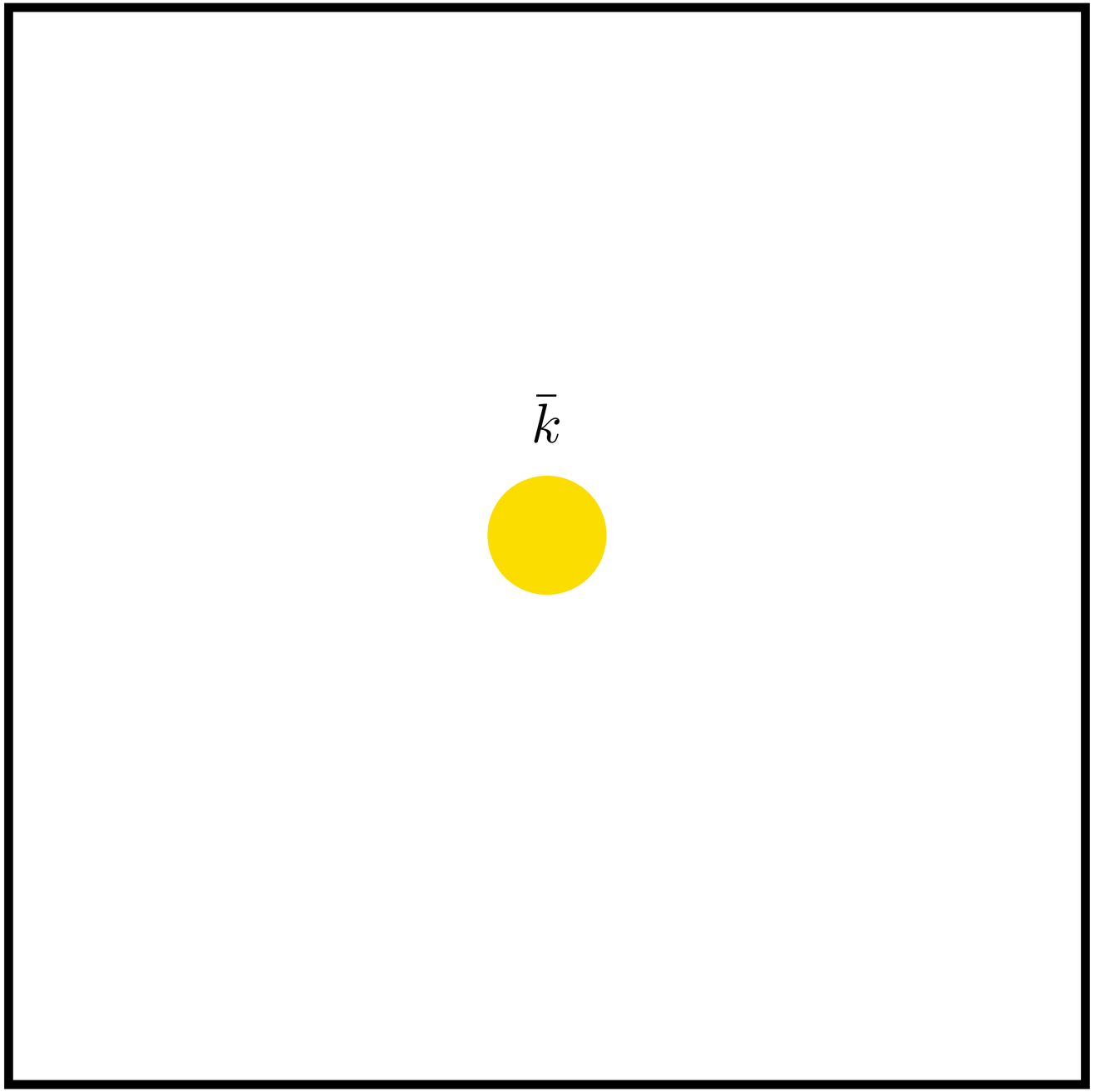
[**MG**, K. Van Tilburg, M. Baryakhtar, N. Weiner, 2307.06989]



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$$E = \sum_i A_i e^{i(\bar{k}+\delta k_i)ct}$$

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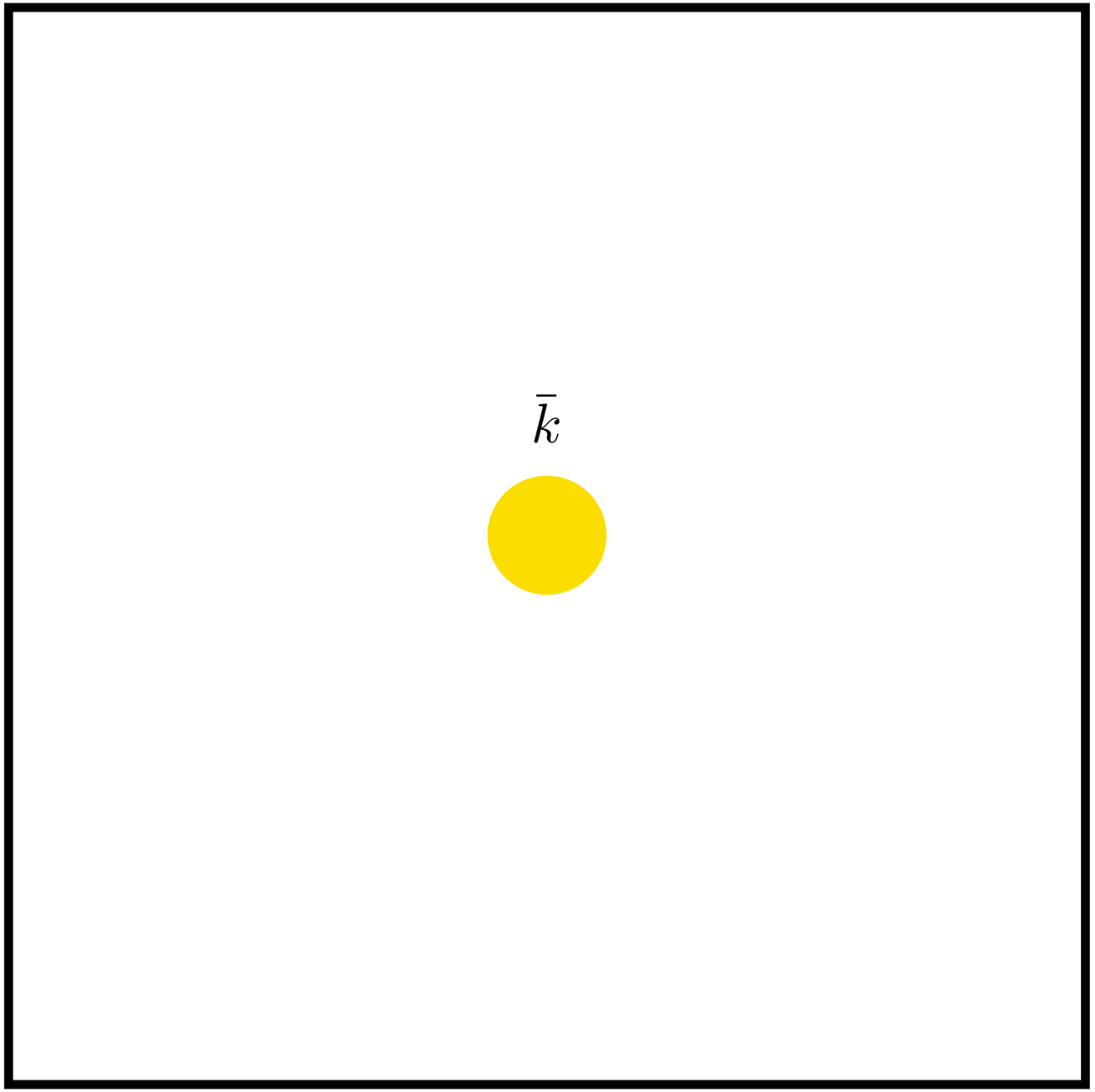

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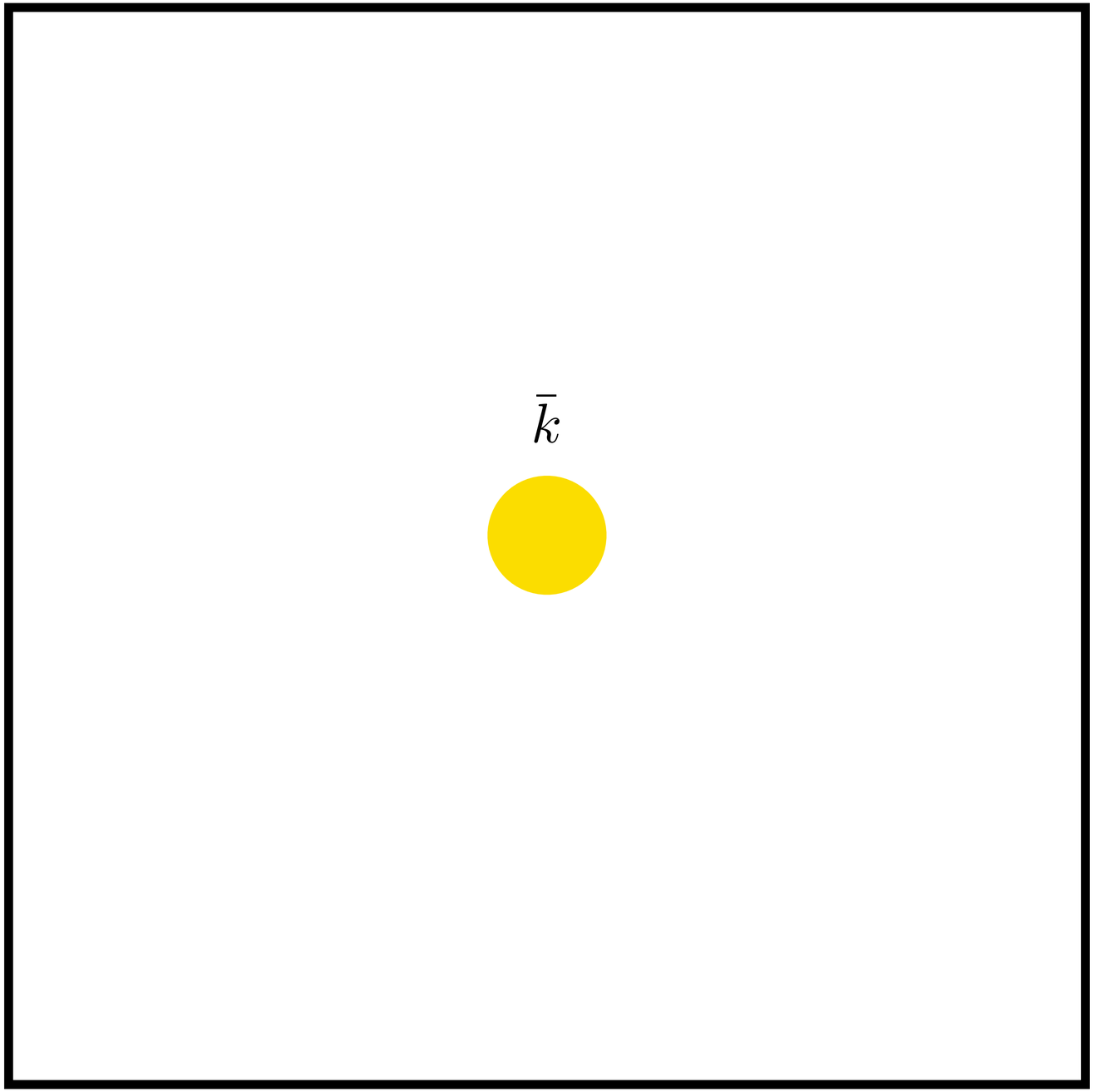

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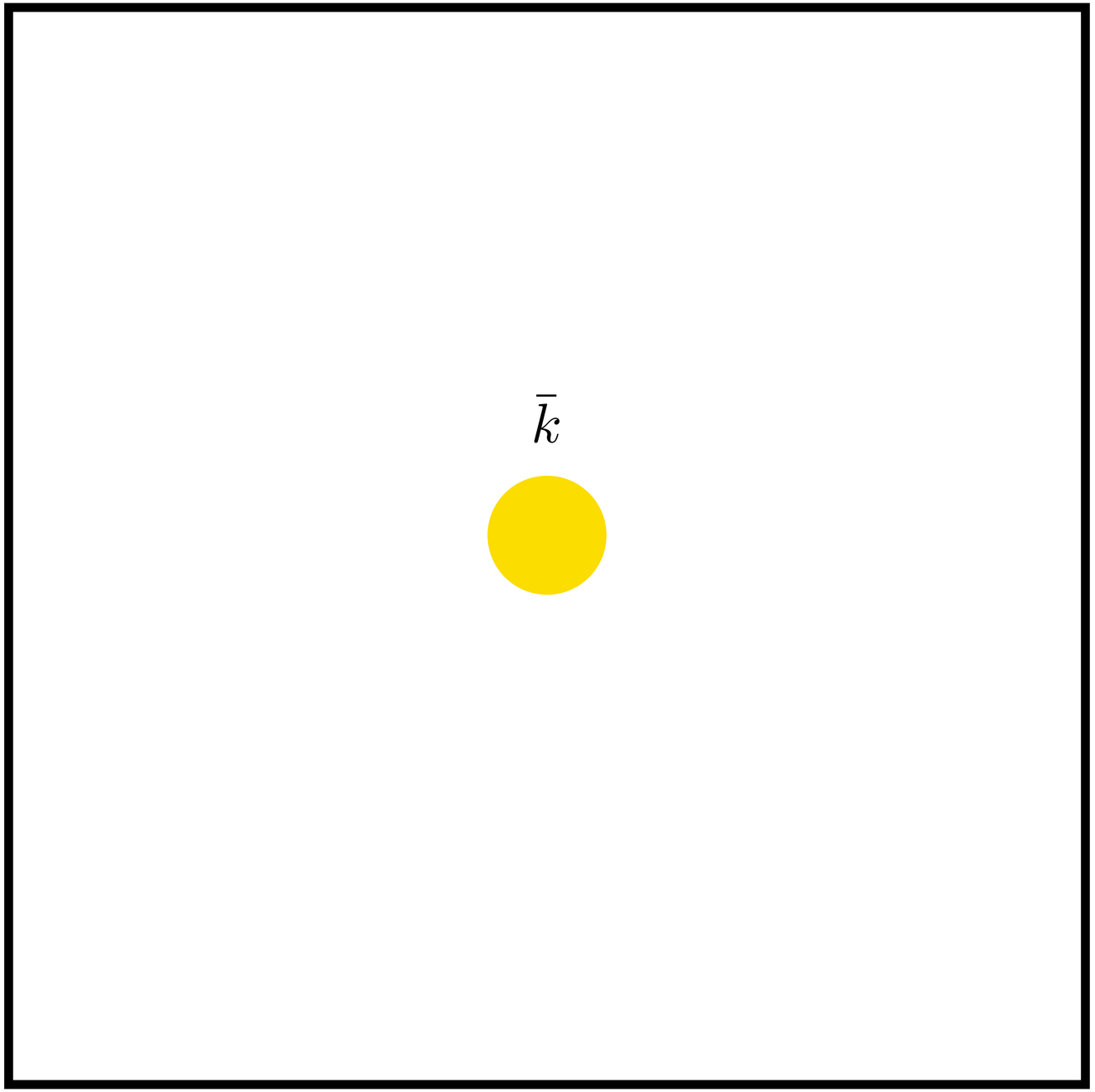

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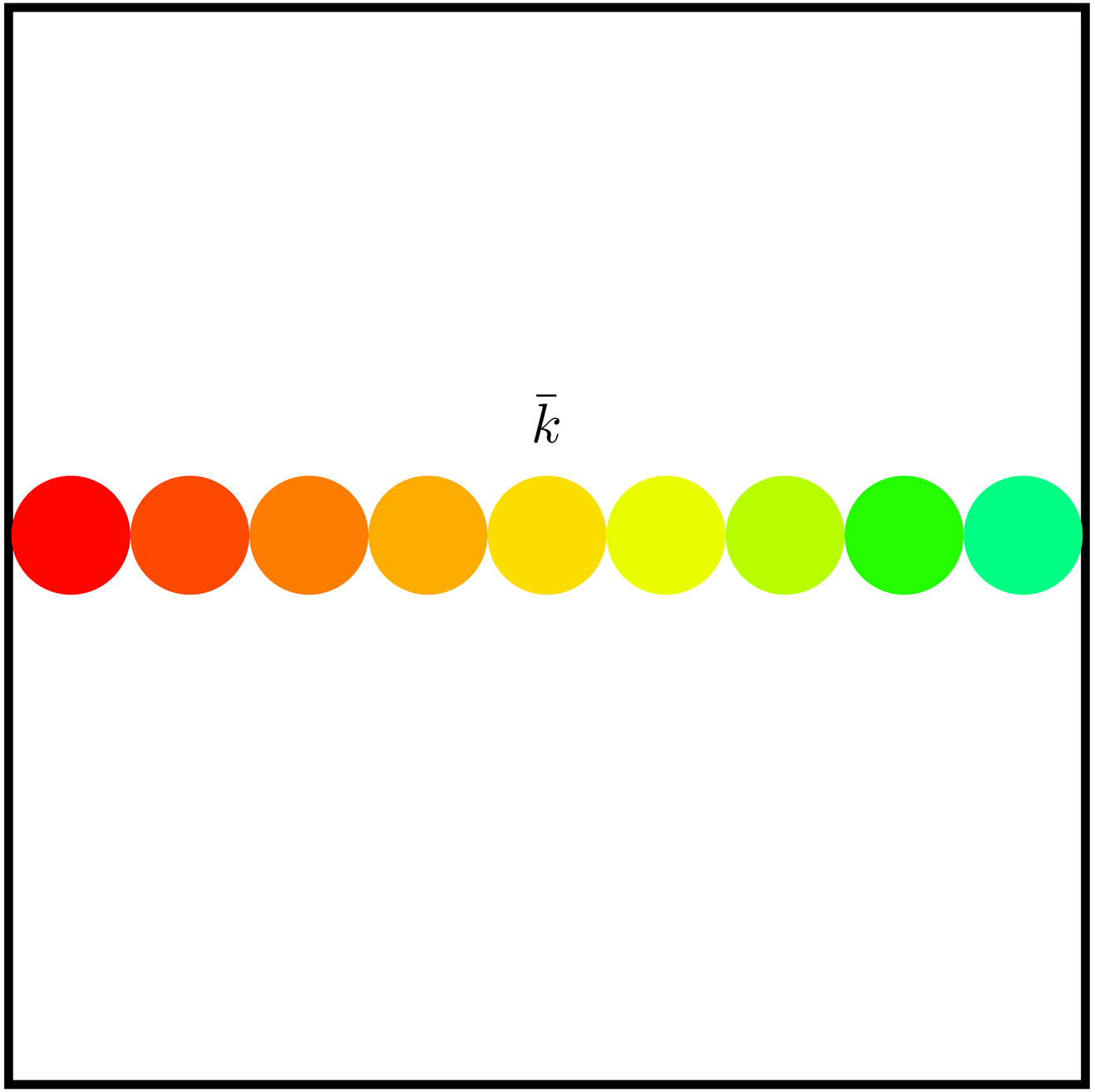

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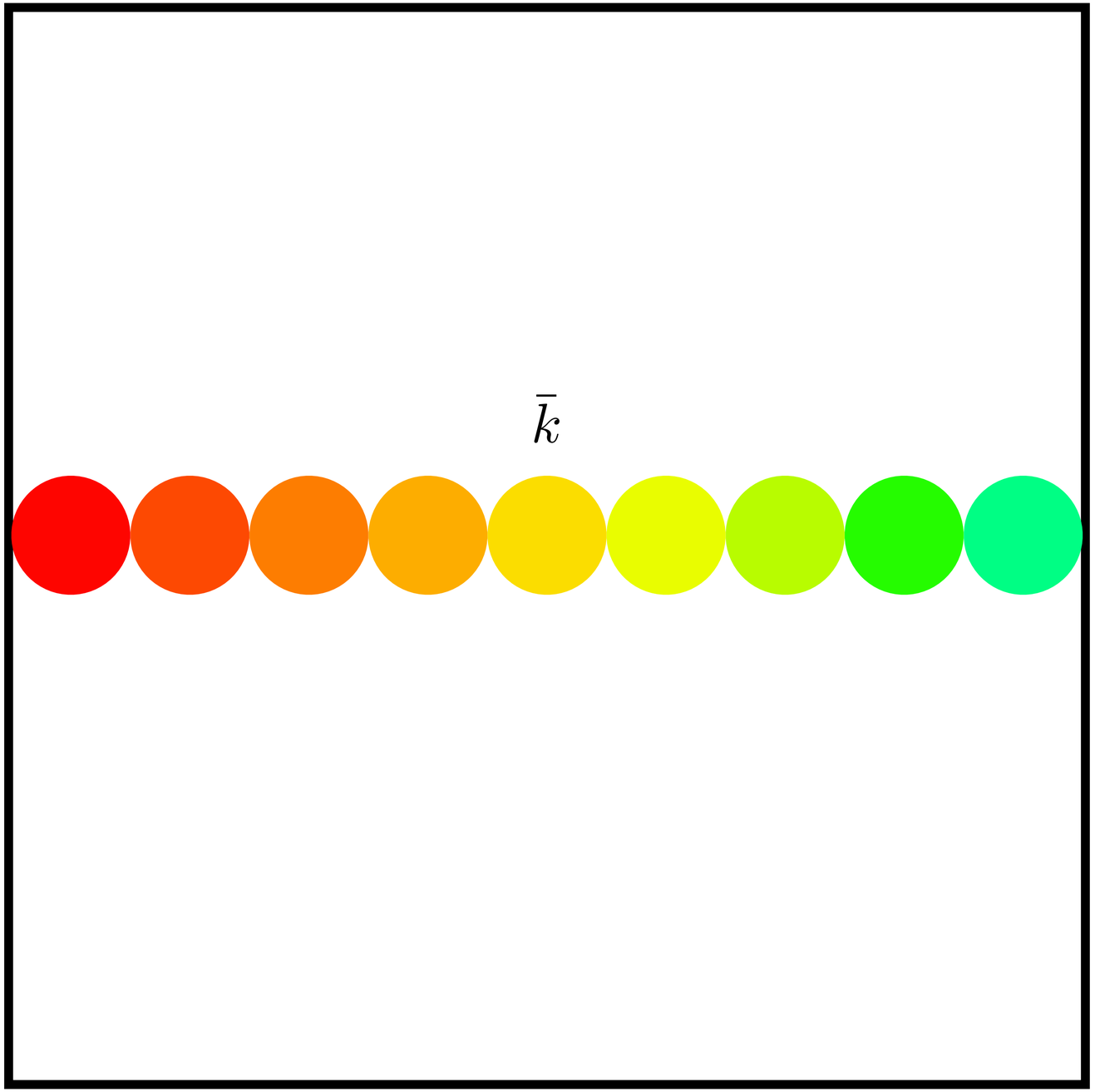

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Grating separates by $\dfrac{\bar{k}}{\pi N}$

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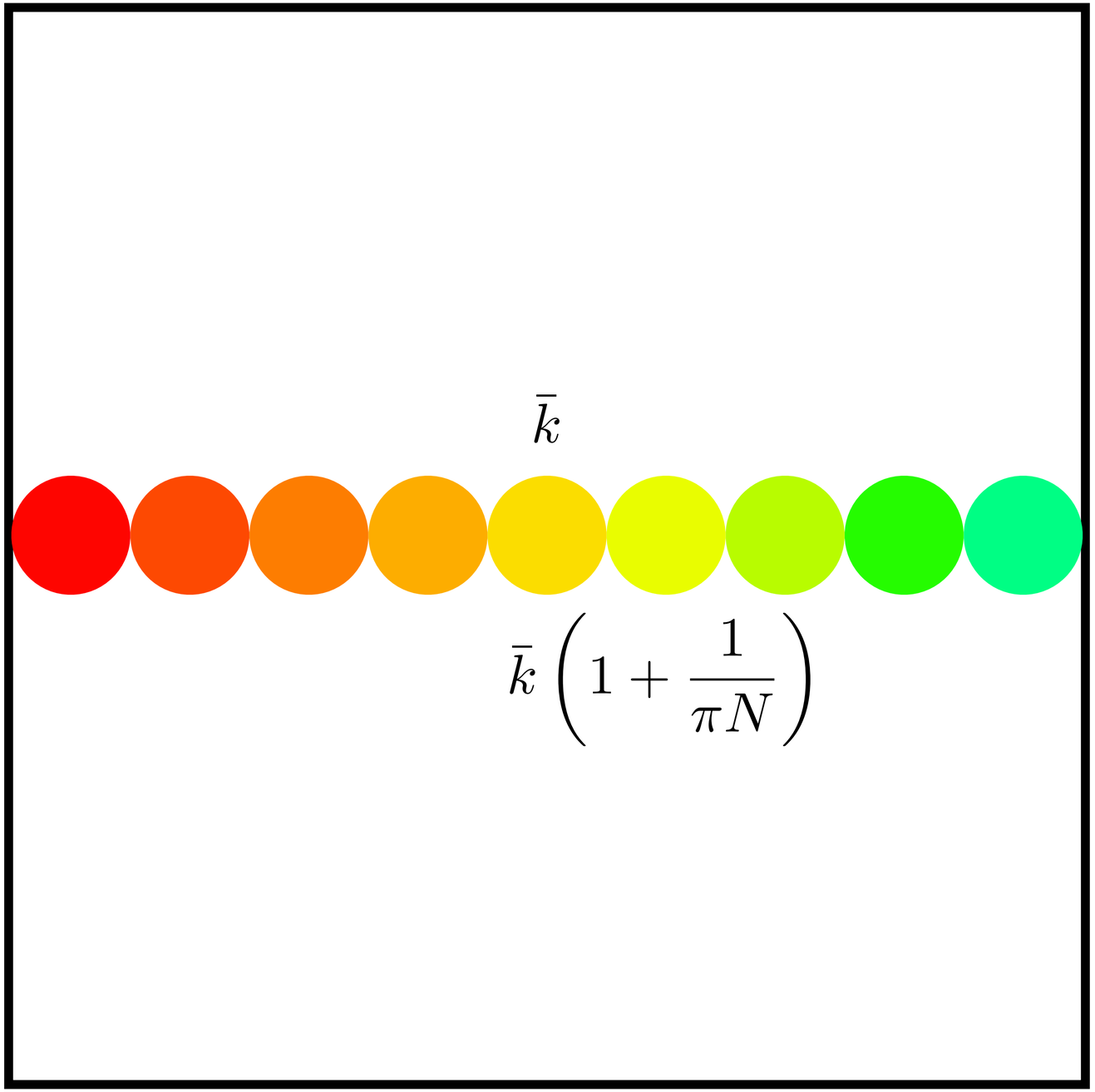

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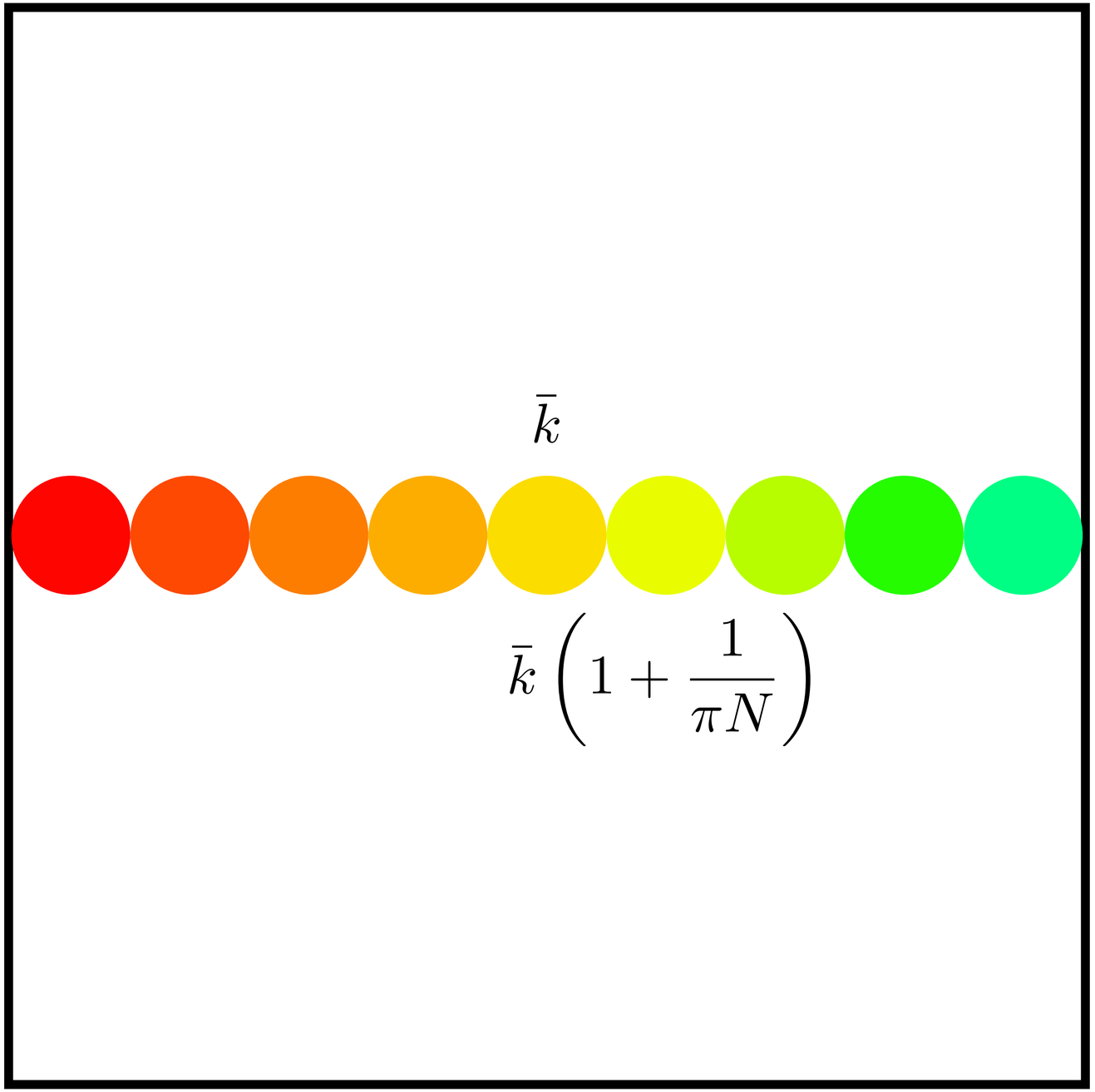

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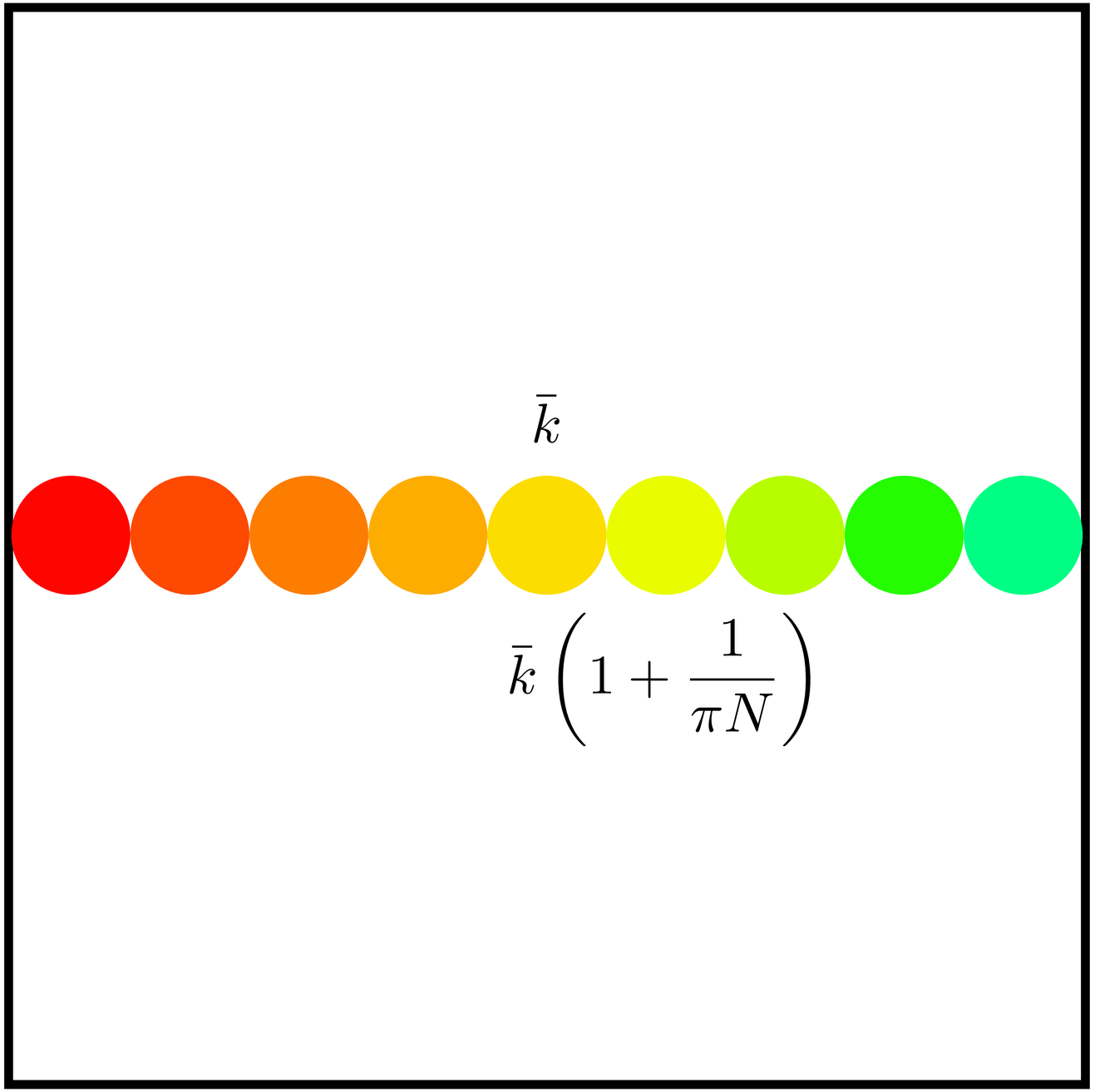

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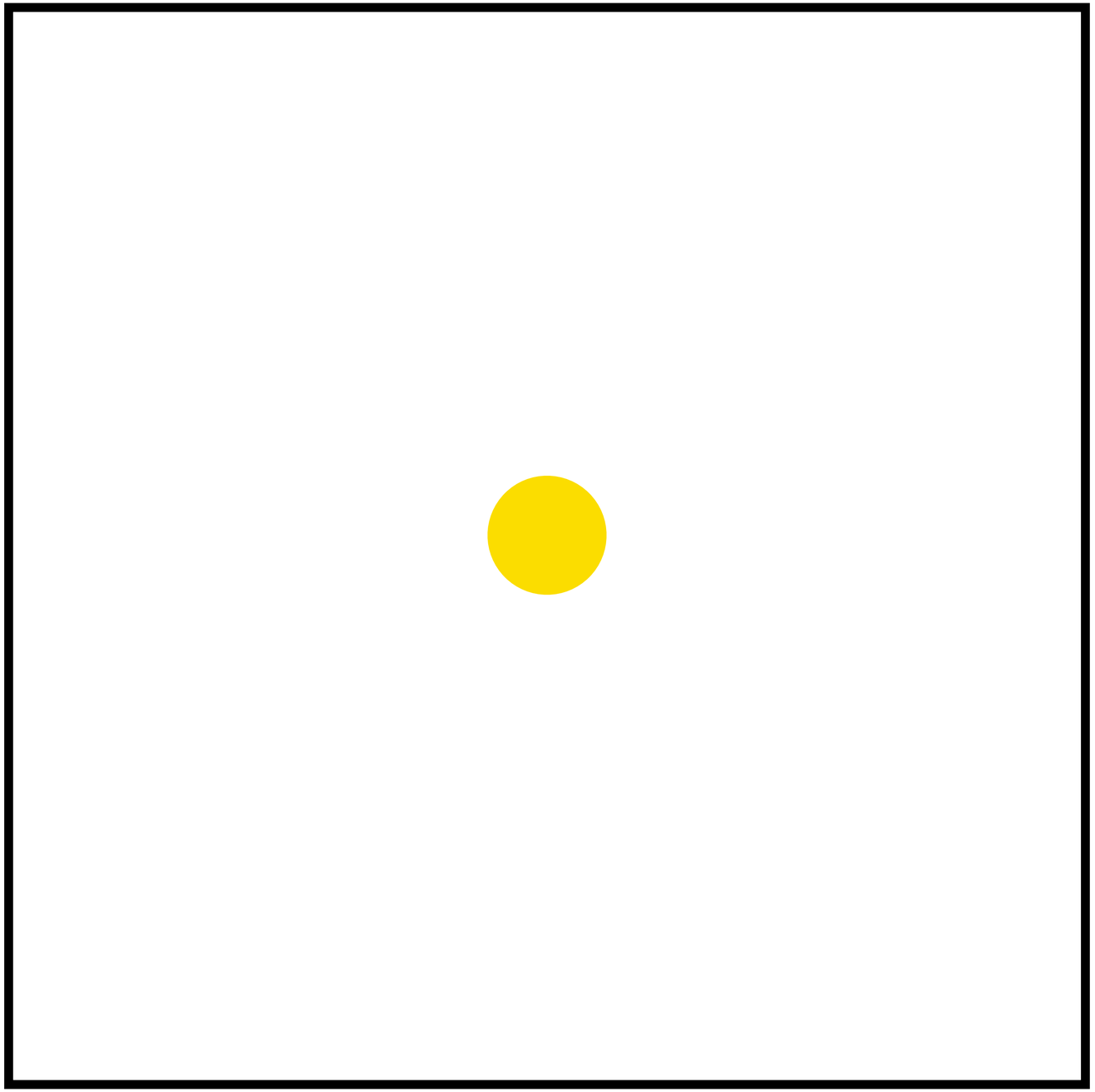

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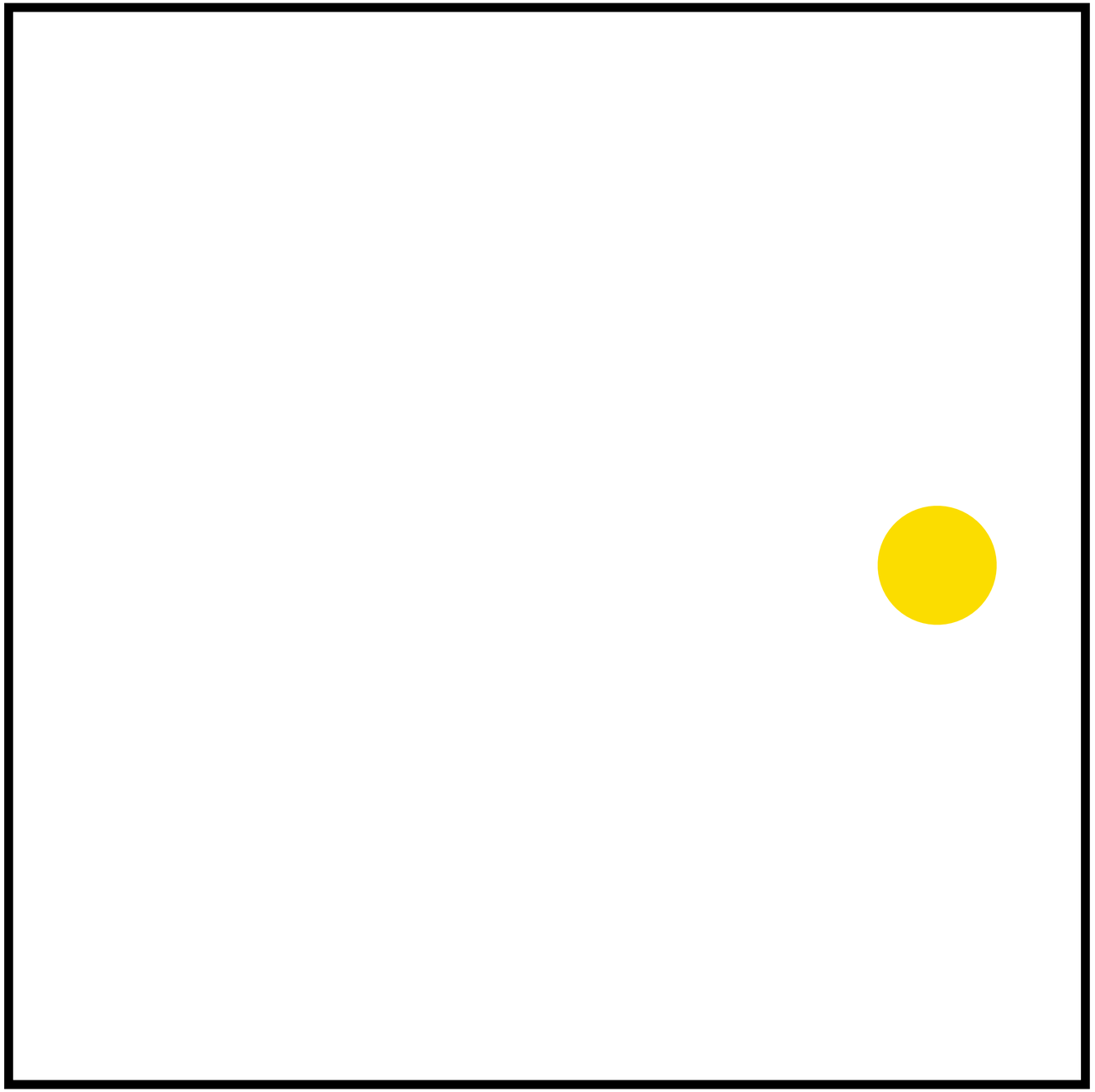

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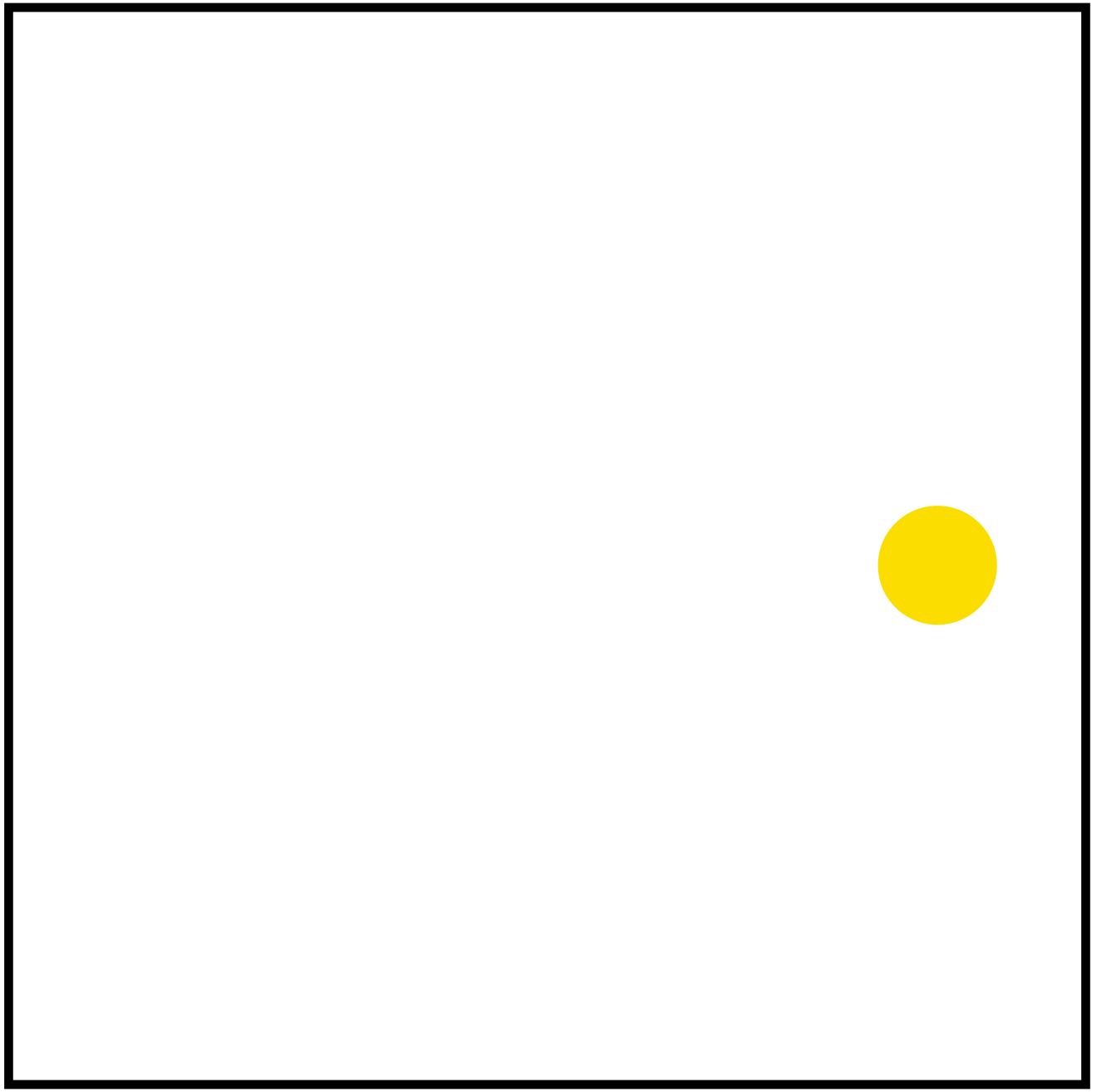

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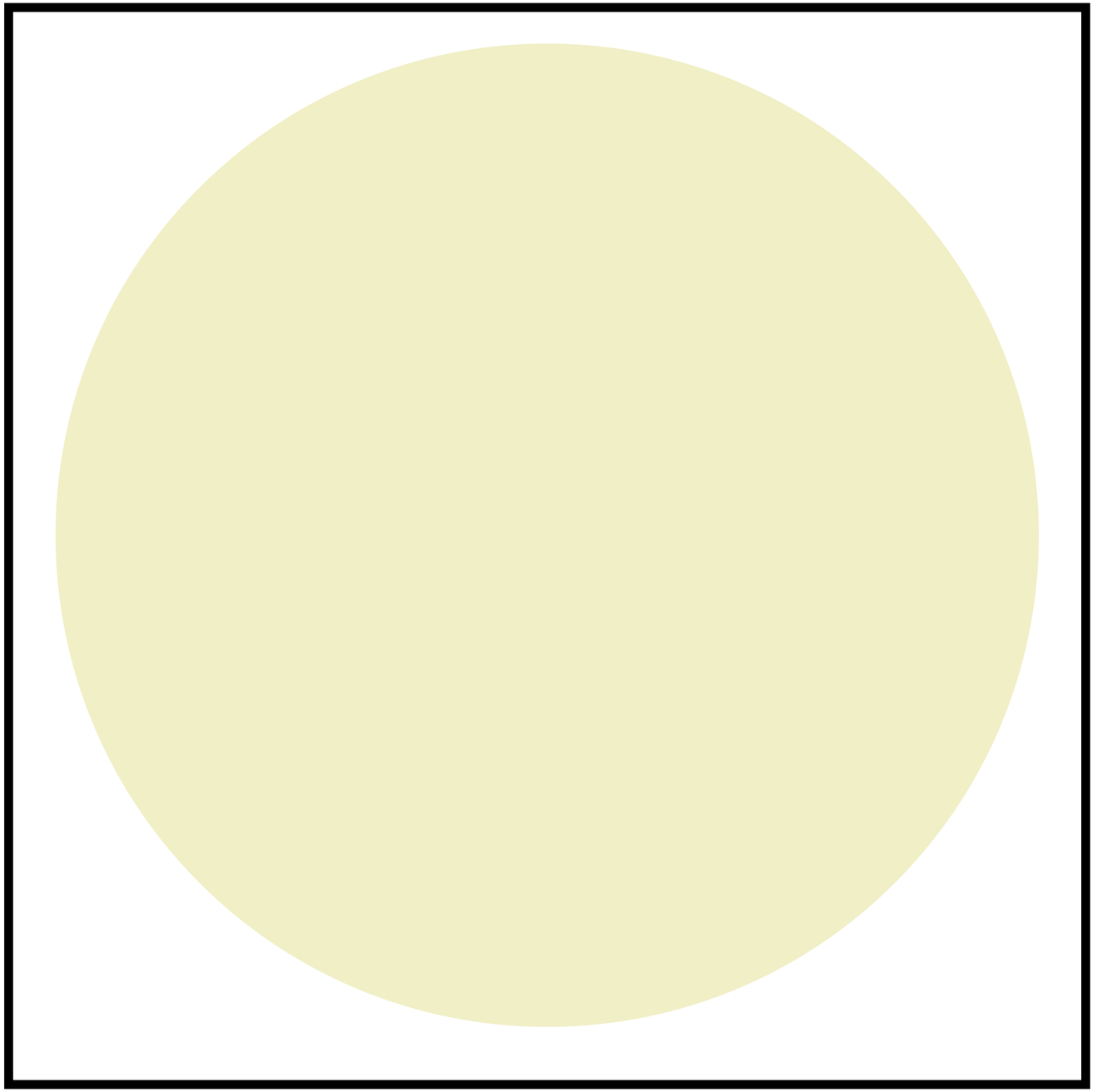

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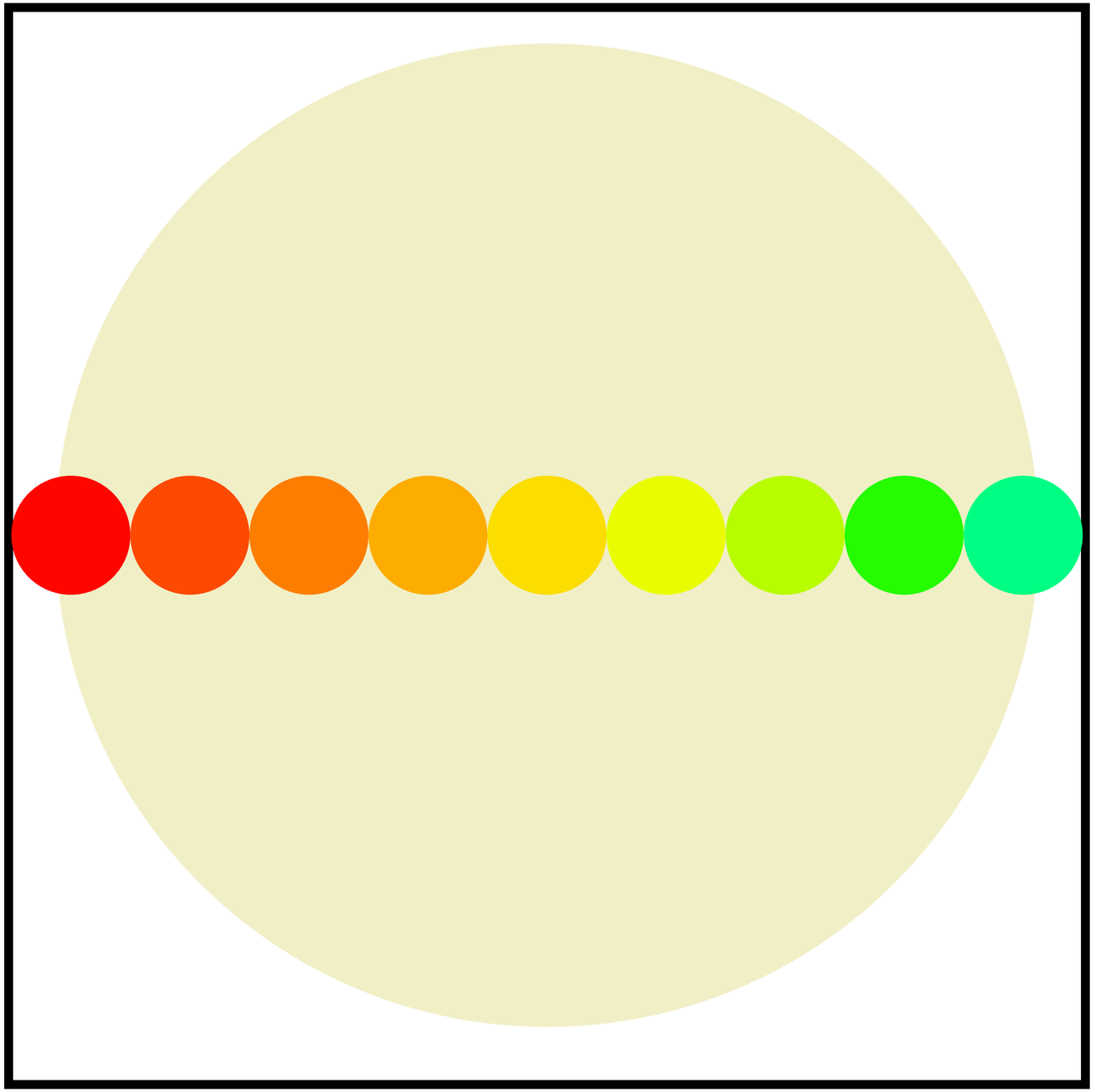

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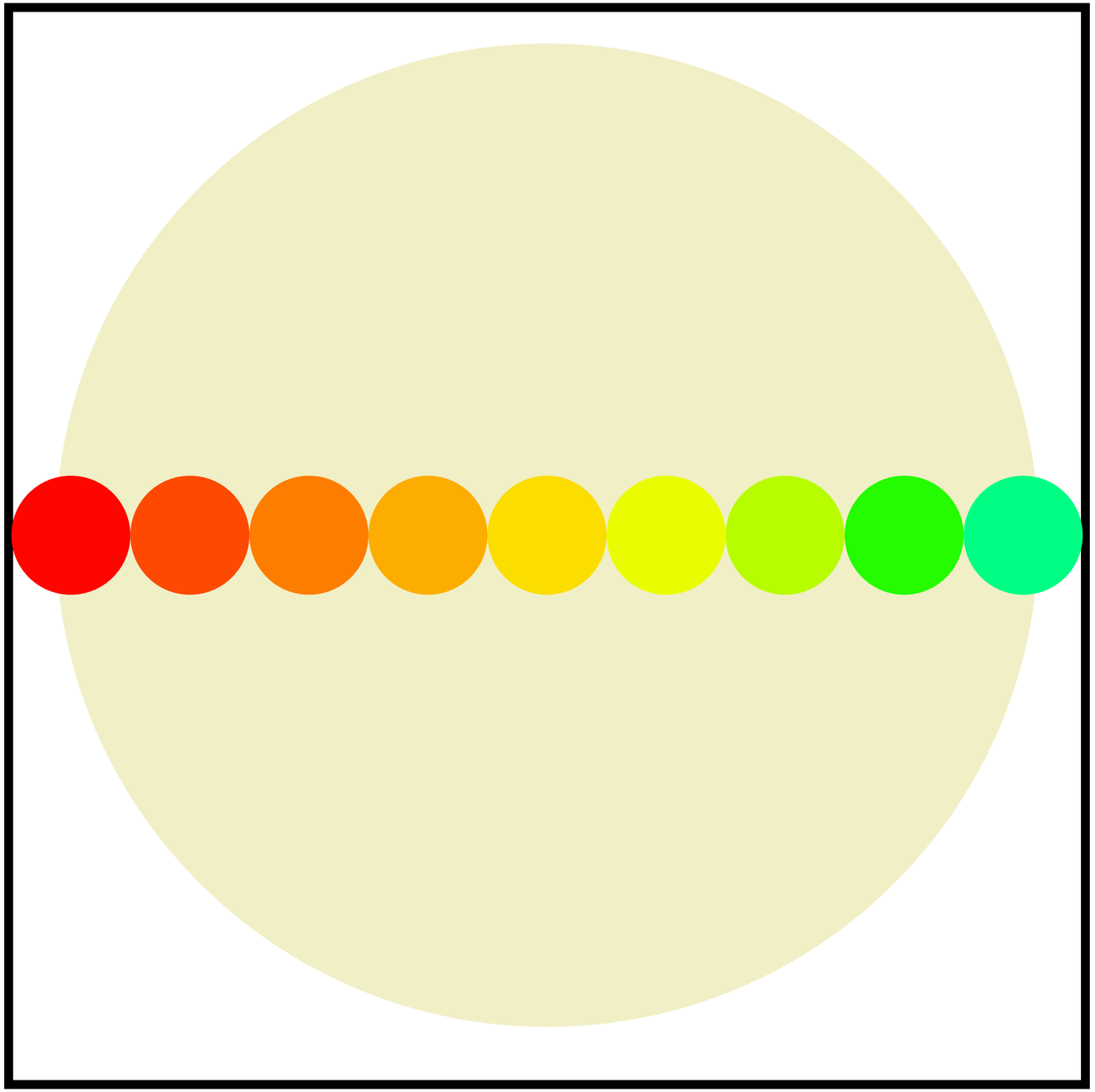

Time-averaged

$$\frac{N}{R} \sim \frac{\theta_{\rm spot}}{\theta_{\rm diffraction}}$$

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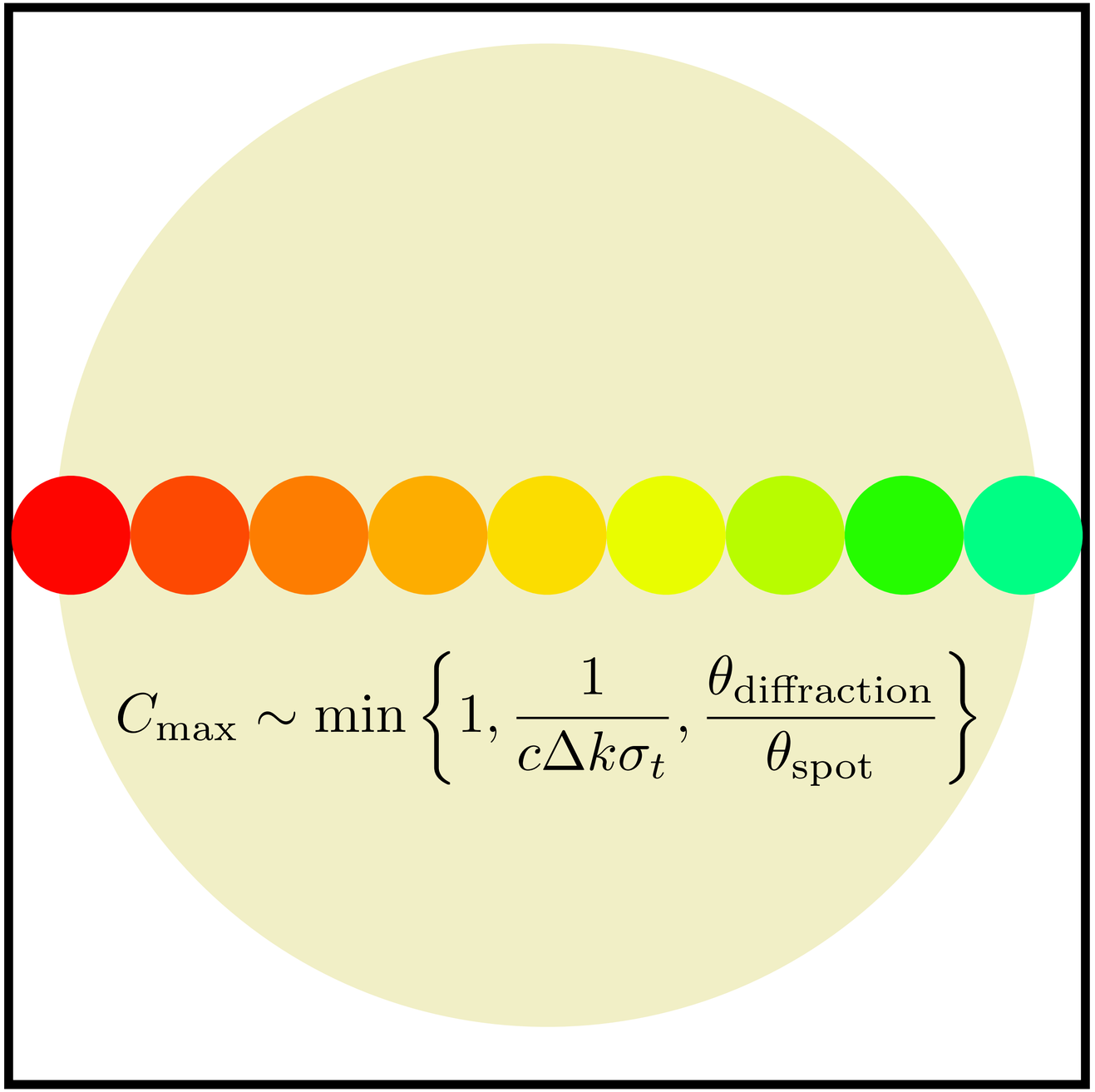

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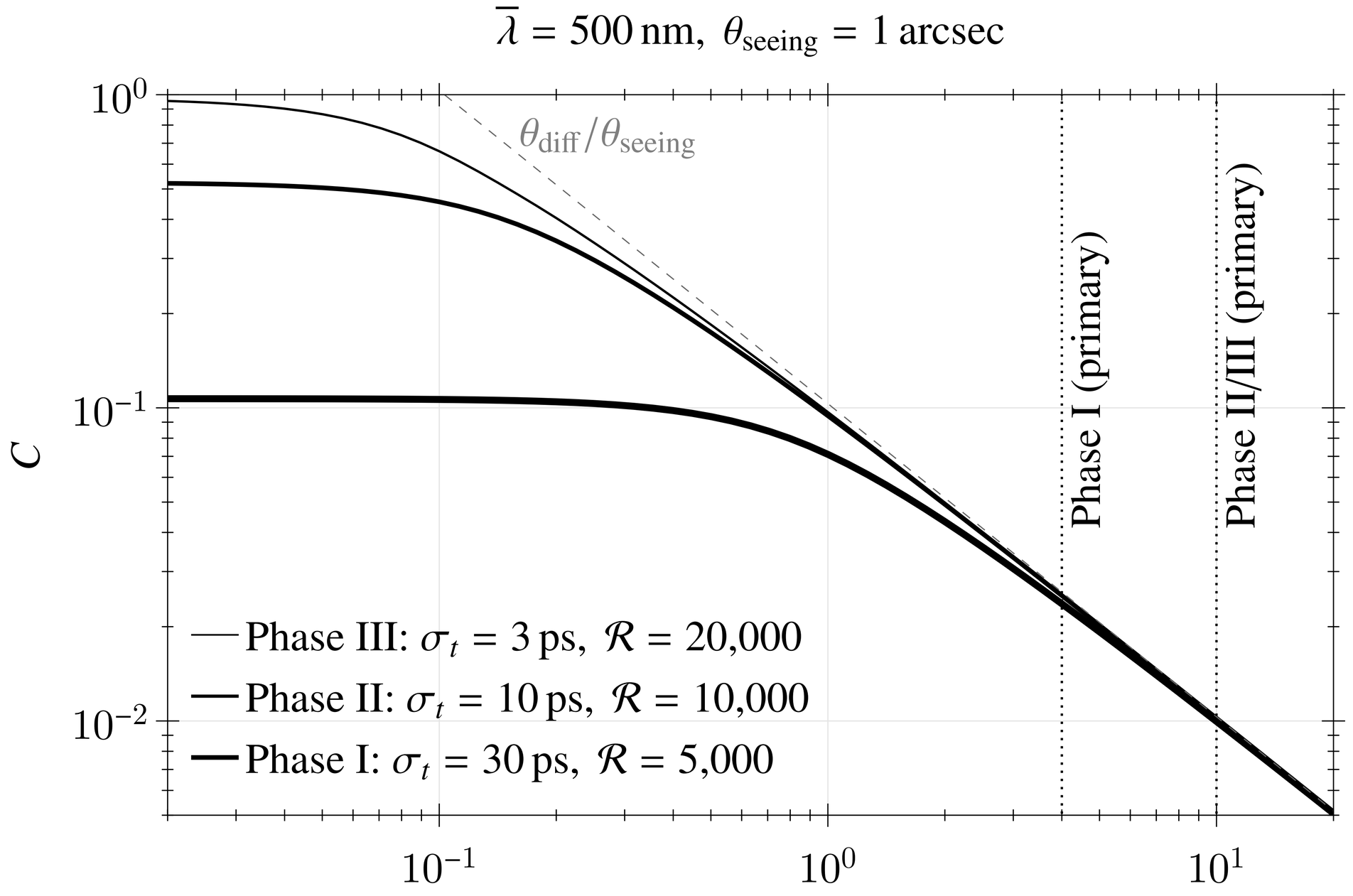

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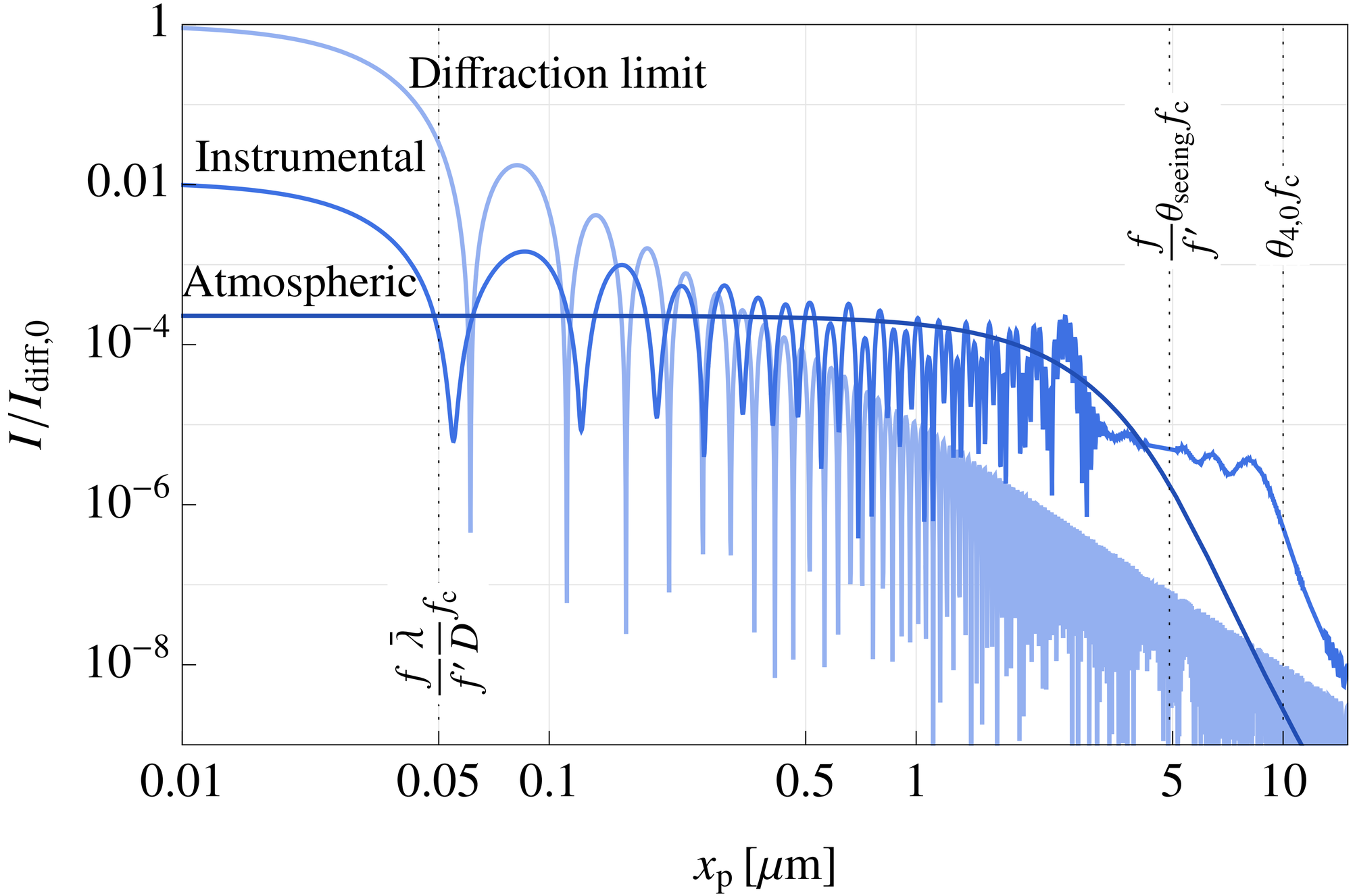

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