Asymptotic safety of gravity-matter systems

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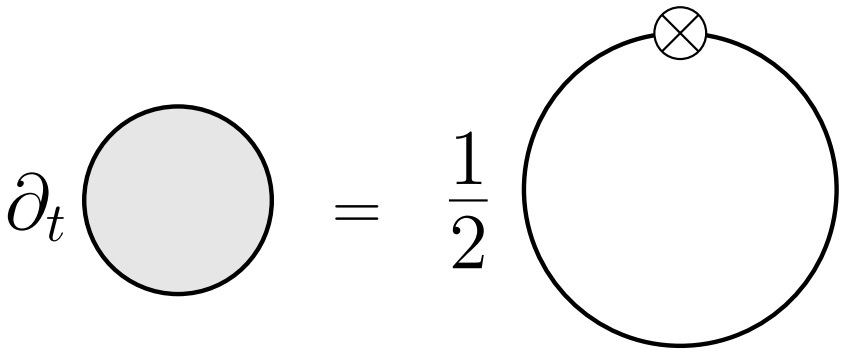
Contents

- Wetterich equation:

$$\Gamma_k = \frac{1}{2}\,\mathrm{Tr}\left[\left(\Gamma_k^{(2)} + R_k\right)^{-1}\partial_t R_k\right] \tag{1}$$

- Graphical representation as one-loop equation:



Analyzing Gravity-Matter systems

- Truncation [3]

$$\Gamma_k = \Gamma_{\mathrm{EH}} + \mathcal{S}_{\mathrm{gf}} + \mathcal{S}_{\mathrm{gh}} + \Gamma_{\mathrm{matter}} \tag{2}$$

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