The (Conformal) Bootstrap Philosophy

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$$+gC_i^{ab}\lambda_a[X^i,\lambda_b]+g\bar{C}_{iab}\bar{\lambda}^a[X^i,\bar{\lambda}^b]+\frac{g^2}{2}[X^i,X^j]^2\Big\}$$

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- Lots of active bootstrap programmes
  - S-matrix
  - Cosmological
  - **Conformal**
  - ...

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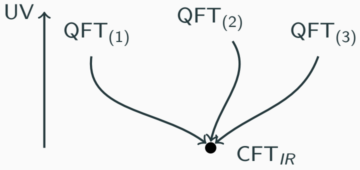
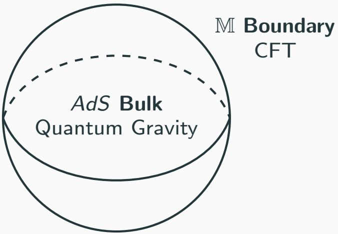


AdS/CFT



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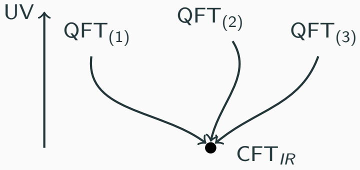

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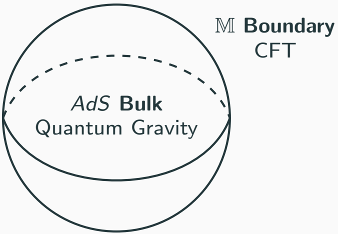

- Conformal symmetry fully fixes 1,2,3-point functions and 4pt functions take the following form

$$\langle \mathcal{O}_1 \mathcal{O}_2 \mathcal{O}_3 \mathcal{O}_4 \rangle = \sum_{\mathcal{O}_r} \underbrace{A^r_{1234}}_{\textit{Constant}} \underbrace{W_{\mathcal{O}_r}(x_i)}_{\text{`Blocks'}}$$

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  - Generalised Schur polynomials
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- New year resolution: 2501:XXXXXX

Summary

Lagrangian = bad