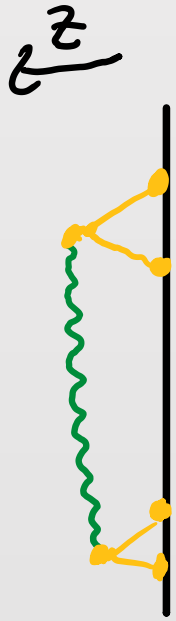


(Anti-)de Sitter Amplitudes

Connor Armstrong, Durham University

Based on 2012.0205, 2106.11903 and upcoming

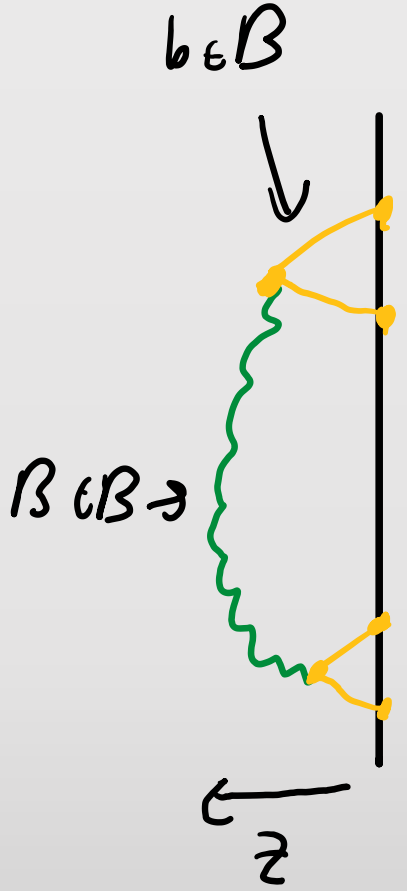
with Arthur Lipstein, Jiajie Mei, Humberto Gomez and Renann Lipinski Jusinskas

Why (A)dS?

- Seeing what amplitude properties hold outside flat space is interesting
- Highly symmetric – we expect this to be reflected in the amplitudes
- Of physical relevance to cosmology
- Connections to holography

What are these "Amplitudes"?

- Feynman Diagrams ⟶ Witten Diagrams
  - Richer Propagator structure
  - Broken translation symmetry



- Scattering Equation Approach
  - Mandelstam Variables ⟶ Conformal Casimirs

$$\int d^n\sigma\ \delta(S_E)\ \mathcal{J}\ I_L I_R \quad \text{w/}\ k_i\cdot k_j \to \tilde{D}_i\cdot\tilde{D}_j$$

and act on "Delta Function"