Contribution ID: **982**   Type: **Talk**

Effective actions from string field theory

Thursday, 30 July 2020 10:45 (30 minutes)

We develop a formal framework for constructing tree-level effective actions for A_∞ and L_∞ string field theories using the ideas of homological perturbation theory. We apply our results to obtain effective actions for massless fields at finite momentum in a large class of both bosonic and superstring backgrounds, making use of a novel propagator to account for integrating out the massless auxiliary fields. In the superstring case, we show that the computation of the effective vertices at zero momentum localizes on the boundary of the worldsheet moduli space provided that the background is described by an $\mathcal{N} = 2$ superconformal field theory. We also discuss the definition of observables in general A_∞ theories, deriving a novel observable for the EKS A_∞ superstring field theory.

I read the instructions

Secondary track (number)

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