String field theory: Past, Present, and Future

Tuesday 4 June 2024 12:00 (1h 30m)

Xi Yin : I will review the formulation of closed (super-)string field theory, its application in string perturbation theory, RR flux backgrounds, D-instantons, quantum string vacua, and discuss some future prospects.

Ted Erler: We review a body of work, following the formulation of Sen's conjectures in the late 1990's, which endeavors to realize D-brane systems as nonperturbative vacuum solutions in open string field theory. We first sketch solutions derived numerically in the level truncation scheme, and later analytic solutions. If time permits I will sketch the status of analogous questions in closed string field theory.

Presenters: ERLER, Ted (FZU, Czechia); YIN, Xi (Harvard University, USA)