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The Transformation between the Sciuto, Caneschi-schwimmer-veneziano interaction vertex in the dual model and the Witten interaction vertex in split string field theory[1] A ABDURRAHMAN, Shippensburg University, I ABDURRAHMAN, University of Washington, M GASSEM, South Texas College — In this paper we find the transformation operator between the interaction vertex in the dual model and Witten's interaction vertex in split string field theory. The procedure employed here results in an explicit conformal transformation linking the two interactions in the matter sector at all levels. Thus establishing the equivalence in the matter sector between the two theories at least at the level of the three vertex. Furthermore, we have discussed the connection between the ghost parts of the interaction vertex in both theories. The two transformations (ghost + matter) differ only slightly due to the insertion of ghost number operators at the mid-point of the string for the ghost part of the vertex. The insertions are required to restore BRST invariance, which is lost when one splits the string into two parts. Also, the procedure followed here generalizes to any number of strings in a straight forward way, which is needed for a theory of closed strings.

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A Abdurrahman
Shippensburg University

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