

There are different kind of zero emerges in the supertachyon case. Because under certain C_{ij} setting the Pfaffian becomes zero. Taking the $A^{6,3,5}$ as example to discuss some zero sets and these zero's implication.

When we set $S_{2,4}, S_{2,6}, S_{4,6} = 0$, we can see that the $Pf(A^{6,3,5}) = 0$.

So in this kinematic condition, the 6-point supertachyon amplitude vanishes. This set of zero implies that the 3 point SYM amplitude will vanish, too when we use the scaffolding identities, then we can see

$$S_{2,4} = 0 \Leftrightarrow \epsilon_1 \cdot \epsilon_2 = 0$$

$$S_{2,6} = 0 \Leftrightarrow \epsilon_1 \cdot \epsilon_3 = 0$$

$$S_{4,6} = 0 \Leftrightarrow \epsilon_2 \cdot \epsilon_3 = 0$$

Which tells us 3 point gluon's amplitude in superstring vanishes when $\epsilon_1 \cdot \epsilon_2 = \epsilon_1 \cdot \epsilon_3 = \epsilon_2 \cdot \epsilon_3 = 0$, but 3 point bosonic gluon's amplitude doesn't vanish under this setting since the F^3 correction might not vanish.