

Abstract

I will discuss two scalar mode excitations in the skew-whiffed $AdS_4 \times S^7$ background of antimembranes. These modes turn out to be invariant under $SU(4)$ subgroup of $SO(8)$ isometry group. We will see that there is no corresponding boundary operator in the ABJM model to match with these bulk modes, and hence conclude that the theory of antimembranes cannot be identical to that of membranes. To get the theory of antimembranes, one has to swap s and c representations in the ABJM model which is possible by the triality of $SO(8)$ and hence only for $k=1,2$.