On some holographic aspects due to domain wall junctions

Francisco Brito

UFCG - Brazil

In this talk we will show how to obtain analogues of the T duality, well known in string theory, in a context of domain wall junctions of different thicknesses. Each domain wall can only support two bound states. We shall take this property into account to obtain the entropy for a collection of junctions immersed in a space-time in $d+1$ dimensions due to the intersection of N orthogonal domain walls immersed in the same space. We show that the entropy of the collection of junctions increases with the area (or boundary) of the space that contains them, which is somewhat analogous to the entropy of a black hole whose entropy increases with the area of the horizon.